UNDERSTANDING
SUBSTANCES
AND SUBSTANCE USE

— A HANDBOOK FOR TEACHERS —

Understanding Substances and Substance Use: A Handbook for Teachers
was researched, compiled and edited by:

Rory Keane Education Officer, Addiction Services, South Western Area Health Board
Sheilagh Reaper-Reynolds Senior Health Promotion Officer, Health Promotion Department, South Western Area Health Board
John Williams National Support Officer, Walk Tall Programme
Esther Wolfe Education Officer, Addiction Services, South Western Area Health Board

Produced by the South Western Area Health Board
Funded by the Walk Tall Programme
Funded by the Irish Government under the National Development Plan 2000-2006
NOTE: The information contained in this handbook is designed for an adult audience working in an educational environment and should not be used as a model for presenting drug-related information and facts to young people.

The terms ‘substance’ and ‘drug’ are used interchangeably throughout this handbook.

This material may be reproduced for educational purposes. Special permission for such use is not required.

Acknowledgements

We would like to extend our thanks to:

Dr. Desmond Corrigan, Chairperson, National Advisory Council on Drugs, for his permission to quote extensively from ‘Facts about Drug Misuse in Ireland’ and for his comments and support for the handbook

Dr. Bobby Smyth, Consultant Child and Adolescent Psychiatrist Specialising in Substance Abuse, Addiction Services, South Western Area Health Board, for contributing the section on adolescent development and for his comments and support for the handbook

Maeve Shanley, Education Officer, Drugs/Aids Service, East Coast Area Health Board, for her comments and detailed proof-reading of the handbook

Aileen Dooley, Manager of the Drugs/AIDS Helpline, South Western Area Health Board and Aoife Fitzgerald, Co-ordinator of the Dublin 12 Local Drug Task Force, for their advice regarding home drug testing

To the following for their support of the development and funding of the handbook.

The Steering Committee of the Walk Tall Programme (Substance Misuse Prevention Programme)

Gerard McHugh Director, Dublin West Education Centre

The Management Committee and Staff of Dublin West Education Centre

The Department of Education and Science
Teacher Education Section, Department of Education and Science
Social Inclusion Section, Department of Education and Science

Mary Johnston National Support Officer, Walk Tall Programme

Susan Dixon Assistant National Support Officer, Walk Tall Programme

The Department of Health & Children for its permission to use the photographs contained in the handbook.

And to the following, who each took the time to read and comment on the handbook:

Elizabeth Kiely, Department of Applied Social Studies, NUI Cork

John Lahiffe, National Co-ordinator, Social, Personal and Health Education Support Service (Post-Primary)

Ancilla O’Reilly, Regional Development Officer, Social, Personal and Health Education Support Service (Post-Primary)

Marion Rackard, Senior Counsellor, Community Alcohol Services, South Western Area Health Board

Garda Mick Donlan, Juvenile Liaison Officer, Newbridge Garda Station, Kildare

Nicola Cassidy, Poisons Information Officer, National Poisons Information Centre, Beaumont Hospital

Olive McGovern, Youth Health Promotion Officer, Health Promotion Unit, Department of Health & Children

Stephen Joyce, Education Development Worker, Blanchardstown Drug Education Resource Centre

Steve Harding, Education Officer, Drugs/Aids Service, East Coast Area Health Board and consultant to the national drug awareness campaign

Eamon Mulvihill, Principal, St. Joseph’s Academy, Kildare

Don Delaney, Director of Communications, South Western Area Health Board
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Defining Drug Terms</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Stages of Drug Use</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Slang Terms</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>The Epidemiological Triangle of Drug Use</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Why Do Young People Use Drugs?</td>
<td>22</td>
</tr>
<tr>
<td>7</td>
<td>Drug Facts</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Tobacco</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Alcohol</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Solvents</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Cannabis</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Ecstasy</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Cocaine</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Amphetamines</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>LSD</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Magic Mushrooms</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Heroin</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Over the Counter and Prescription Drugs</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>Signs and Symptoms of Drug Use and the Issue of Home Drug Testing</td>
<td>73</td>
</tr>
<tr>
<td>9</td>
<td>The National Drugs Strategy and School Policy on Substance Use</td>
<td>76</td>
</tr>
<tr>
<td>10</td>
<td>Using Outside Sources for Drug Education Inputs</td>
<td>79</td>
</tr>
<tr>
<td>11</td>
<td>Drug Use Scenarios</td>
<td>81</td>
</tr>
<tr>
<td>12</td>
<td>Contacts, Further Reading and Websites</td>
<td>83</td>
</tr>
</tbody>
</table>
Foreword

A handbook for teachers drawing on the highly valued materials on drug prevention available to Primary and Post Primary Schools in Ireland is a welcome addition to our resources in this vital area. Hopefully it will enable all teachers to become part of our national prevention effort. It is important that the numbers experimenting with drugs be reduced because in doing so the number of regular users reduces and in turn, the number of problematic and/or dependent users can also be reduced.

Despite the fact, as the authors point out, that very few human beings can describe themselves as drug free (how many among us have never taken a medicine, drank tea, coffee or a cola drink containing caffeine?) the evidence is clear that when it comes to illegal drugs most young people in Ireland do not experiment with them. More worrying, in view of the potential for harm, is the fact that most young people not only experiment with the two most harmful legal drugs – tobacco and alcohol – but use large amounts on a regular basis from quite an early age. This poses a huge challenge to those of us who see prevention, not as a universal panacea for “the drug problem” but as one, albeit essential element in our National Drugs Strategy.

Recent research shows that programmes which are properly planned and delivered can have an impact on young peoples’ choices about using chemicals to alter consciousness and reality. However, such school programmes on their own cannot provide lifelong protection. Like vaccines, they must be reinforced by booster sessions at home and in the out-of-school environment. Effective interventions, such as those which underpin this handbook, can all too easily be undermined by overt and subconscious messages to young people that chemicals are glamorous, fun, life-enhancing and, above all, risk free.

School-based programmes have the potential, if used as directed, to foster an environment among young people which allows them to thrive and develop within a knowledge-based, information-led, technological society.

It is doubtful if an individual, who is chemically impaired on a regular basis, can develop their true potential and worth in the modern world we now inhabit. The challenge faced by young people and their educators is how to optimise opportunities to avoid chemical impairment, to strengthen each individual’s ability to assess the value and worth of chemical intoxication in their own lives, thereby maximising outcomes which enhance physical and mental well-being.

I have no doubt that the enormous work which has gone into this handbook will successfully help teachers and pupils achieve their goals.

Dr. Desmond Corrigan
Chairperson
National Advisory Committee on Drugs
Drug use and its impact on society is an emotive issue, particularly where young people are concerned. Much of the debate which surrounds drug issues in Ireland in both the media and at more local, intimate levels is fuelled by a range of misapprehensions, misunderstandings and misinformation.

In this climate it can be challenging for those working in schools to ensure that drugs education is properly seen as part of an integrated, holistic approach to a young person’s development based on educational principles, rather than have it informed by divisive, reactionary responses to wider social issues.

The aim of this booklet is to provide you with accurate, evidence-based information to promote your understanding of drugs and drug use. The booklet looks at:

- Defining drug terms
- The different stages or levels of drug use
- The epidemiological triangle
- Drug facts
- Signs and symptoms of drug use
- Responses to drug-related scenarios within the school context
- The National Drug Strategy and the development of substance use policy for schools
- Guidelines for the use of guest speakers
- Useful contacts
- Sources for further information
This approach is informed by the understanding that if drugs education is to be effective, it needs to be cognisant of the habits and meanings attached to drug use and specifically differentiate between the levels of use and move away from a myopic focus on dependence at the expense of the type of use young people are most likely to experience, directly or indirectly.

In putting this booklet together, we have drawn on the collective experience of members of the Walk Tall National Support Programme and staff of the Addiction Services and Health Promotion Department of the South Western Area Health Board. We have also drawn from the work of primary and post-primary teachers and teacher trainers in substance use to ensure that the information in the booklet meets the needs of working teachers. In our experience, this is an area where schools have the capacity to do enormously significant educational work; however, we would equally acknowledge that if teachers do not have the support of both the school and the wider community in the work they do, developing a healthier response and attitude to drug use will prove difficult.

John Williams, National Support Officer, Walk Tall Programme
Sheilagh Reaper-Reynolds, Senior Health Promotion Officer, Health Promotion Department, South Western Area Health Board
Rory Keane, Education Officer, Addiction Services, South Western Area Health Board
Esther Wolfe, Education Officer, Addiction Services, South Western Area Health Board
What is a drug? The following section looks at defining a range of different drug terms and drug-related behaviours.

Drug
In the broadest terms, a drug is “… any substance which changes the way the body functions, mentally, physically or emotionally”.!
This definition does not discriminate between:

- alcohol
- tobacco
- caffeine
- solvents
- over the counter drugs
- prescribed drugs
- illicit drugs

Rather it focuses on changes in the body and/or behaviour brought about through the use of such substances. These substances are also referred to as psychoactive drugs, meaning that they affect the central nervous system and alter mood, thinking, perception and behaviour.²

Equally, the definition makes no distinction between the legality, social acceptability or ‘value’ of drugs. Blanket definitions which attempt to cover these areas as well as the substance/user/affect nexus often have weak logic underpinning their meanings, making them vulnerable to challenge, particularly in terms of highlighting inconsistencies. For example, if alcohol and tobacco are not defined as drugs, what does that say about adult society which approves and endorses their use, (mindful of the health and social costs they can both incur) but disapproves of the use of cannabis and ecstasy by young people?

Once a broad, working definition of drugs has been established, one is better placed to discuss the health, personal and social costs arising from substance use. This does not mean that the legal status of any drug is not important; rather, it acknowledges that the risks arising from drug use are not present exclusively in relation to the criminal/justice system.

**Drug Use**

Drug use is a broad term to cover the taking of all psychoactive substances within which there are stages: drug-free (i.e. non-use), experimental use, recreational use and harmful use, which is further sub-divided into misuse and dependence.

**Drug Misuse**

Substance misuse is defined by the Royal College of Psychiatrists as “… any taking of a drug which harms or threatens to harm the physical or mental health or social well-being of an individual or other individuals or society at large, or which is illegal.”³

**Abuse, Dependence, Addiction**

As with all of the terms discussed here, the meaning of ‘drug addict’ and ‘addiction’ are not fixed; their meaning being modulated by both the social and cultural context and the intended purpose of
their use. The notion of addiction to a wide range of substances and behaviours is now firmly embedded in our cultural outlook. However, increased usage of the terms has not automatically ensured an increase in the level of understanding of the process of dependence. The following definitions are taken from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) a diagnostic manual for clinicians and, whilst their content may be outside of the normative remit of the classroom, they clearly illustrate the processes involved in substance abuse and dependence.

**Abuse**

Substance abuse is described as a: ‘maladaptive’ pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following within a 12 month period:

1. Recurrent use leading to failure to fulfil major role obligations (work, home, school, etc.)
2. Recurrent use in situations where it is physically hazardous (e.g. drunk driving)
3. Repeated substance related legal problems (repeated disorderly conduct while drunk)
4. Persistent use despite recurrent social/interpersonal problems caused or exacerbated by the effects of a substance (e.g. arguments with spouse or physical fights)

**Dependence**

Substance dependence is described as a: ‘maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by three (or more) of the following within a 12 month period:

1. Tolerance: a need for increased amounts of a substance to achieve the desired effect or a diminished effect with ongoing use of the same amount of substance
2. Withdrawal
3. The substance taken in larger amounts over longer periods than was intended
4. Persistent desire or unsuccessful efforts to cut down or control use
5. A great deal of time spent in activities relating to obtaining the substance, using the substance or recovering from use
6. Significant social, occupational or recreational activities are given up or reduced because of use
7. Use continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance

What both these definitions share is the accumulation of problems in an individual’s health, relationships and position in a broader social framework over a period of time – 12 months in both cases. Responses to young people’s drug use which are couched in adult understandings of adult drug misuse/dependence and see young people’s drug use from such a perspective are not only unlikely to meet the needs of young people but are also unlikely to work. The following section looks at the factors involved in the different stages of drug use and specifically the different types of drug use some young people may typically experience.

† Maladaptive refers to behaviours which are debilitative and ‘overlearned’.
Drug use does not automatically lead to addiction nor is it universally characterised by behaviours associated with dependent substance use. If our responses to drug use are to be effective, they have to be embedded in this understanding. The diagram presents a simplified model of the different stages or levels of drug use, starting with a Drug Free stage.
Drug Free

The drug free stage is an interesting one and probably represents a drug status which is aspirational rather than actual. The reality is that we live and, as drug educators, work in an environment where drug use is an intimate part of our culture. Putting illicit drug use to one side, tea, coffee (both containing the stimulant substance caffeine), tobacco, over the counter and prescribed medications and alcohol are prevalent throughout our homes, work and social domains in a myriad of forms with equally diverse uses. This has an impact on young people from birth and throughout their childhood and adolescence – long before we start to directly and formally address drugs education issues with them.

With this in mind, the drug free state can be primarily regarded as an idealised one. It is presented to dependent drug users as an indication of where they should aspire to be (and how different their world would be if they were not using drugs). It may also come about as the result of a conscious decision to abstain from drug use. However it rarely refers to all substances contained within the definition of ‘drugs’.

Patterns of Adolescent Drug Use

Several different patterns of young people’s drug use have been identified, mainly centred around experimental and recreational use:

- Exploratory or Experimental Use
- Social Use
- Emotional or Instrumental Use, which has two different strands:
  - Generative or Hedonistic Use
  - Suppressive or Compensatory Use
- Habitual Use
- Dependent Use

Exploratory Or Experimental Use

The experimental stage of drug use is a short-term, learning phase, influenced by culture and availability and characterised by:

- peer group activity
- random choice of drugs

Within an Irish context, young people’s experimentation with drugs will often feature alcohol and/or tobacco, given their prevalence and the ease of access to them. Availability (particularly alongside curiosity), anticipation of effects, youth culture and current fashions regarding substance use each play a role in young people’s experimentation with drugs. For the majority of people, experimentation is confined to those drugs which are socially acceptable. Experimentation with substances does not automatically lead onto recreational drug use or, indeed, dependent use and may cease once the initial motivating factors have been satisfied.
This is an important point to consider – that drug use at any stage in the model presented does not indicate an inevitable progression towards the next stage, i.e., it is not sequential; rather, as the next diagram shows, it is a continuum where at different stages in people’s lives, depending on their circumstances, needs and motivations, they will occupy different positions across the range.

The following characteristics of experimental use have been identified:

- Curiosity and risk taking are deemed the primary motive
- Mood altering effects are secondary to the ‘adventure’ of drug use itself
- The young people may try more than one substance but usually not more than a few times.

As with any drug use by young people, experimental use can be an enormous source of concern; but Morgan (2000) notes that: “… risk factors are not always negative in nature, especially in the case of experimental drug use. This is illustrated in a longitudinal study by Shedler and Block (1990) who collected information on personality and adjustment from five years upwards. Their results showed that, at least in the American context of the time, those adolescents who engaged in mild experimentation with cannabis were relatively better adjusted (less anxious particularly) than those who had never experimented while frequent users were the least well adjusted.”  

**Social Use**

Following on from the experimental phase of drug use is the recreational or social phase. This phase is characterised by:

- regular use
- group activity
- use over a longer period of time
The key here is that control is exerted over use, with specific choices being made in relation to what drugs are used, in what amount, where they are used (normally in specific situations) and when. As users become schooled in what drugs give the effect they desire in different situations, their substance use develops a degree of predictability and, generally, is not perceived to be problematic.

What is at play here is a combination of personal and social checks and balances which moderate and sanction drug use. However, this does not mean that recreational drug use comes without its own dangers. The predominant experience of recreational drug use in Ireland obviously relates to alcohol given its centrality of place in our culture; but this does not mean that what is socially permissible comes without health risks.

Recreational or social use has particular emphasis on the peer group, its influence, its networks and a sense of belonging. The following have been identified as the characteristics of social use:

- Social acceptance is the primary motive.
- The context is strictly social: parties, field drinking, tobacco use ‘behind the bike sheds’, etc.
- Drugs are freely shared or sold at cost.
- The aim is to fit into the group and ‘loosen up’.
- Experimentation with mood swing is usually still a factor of use.

**Emotional Use – Generative Or Suppressive**

These two patterns of social drug use centre on the purposeful manipulation of feelings, emotions and behaviour with an aim to elicit or inhibit certain behaviours and feelings. With this type of drug use, the adolescent is now generally seeking the mood swing.

The following have been identified as the characteristics of emotional use, which is generative or hedonistic in nature:

- To have fun is the primary motive.
- Binges are typical (in terms of alcohol this is defined as drinking five or more drinks in a row) motivated by the desire to get high and feel good.
- The purpose is to elicit pleasurable feelings or to explore new feelings or emotions.

The following have been identified as the characteristics of emotional use which is suppressive or compensatory in nature:

- To cope with stress and uncomfortable feelings is the primary motive.
- To suppress negative or depressing emotions.
- Drug use tends to be solitary but can also take place in the context of the peer group.

**Habitual**

This next stage of use sees an increasing concentration on the drug use at the expense of other interests which, in turn, can contribute to a range of problems.
The following characteristics of habitual use have been identified:

- Frequency and preoccupation with use starts to impact across an adolescent's life.
- Relationships, peers and activities are substance-related.
- Sleep and concentration difficulties begin to be experienced.
- Withdrawal symptoms may occasionally be experienced, particularly after prolonged use.
- Tolerance may increase, cravings may be experienced and the user becomes preoccupied with thinking about the next occasion for use.
- Behavioural problems increase, school performance is seriously affected and the young person is preoccupied with the mood swing caused by drug use.

**Dependent Use**

The definitions given in the preceding section on habitual use cover the factors involved in dependent use. The key factors of dependent use compared to other stages of substance use would be:

- Lack of control over substance use
- Ongoing use regardless of the awareness of potential or actual problems experienced
- Use in hazardous situations
- The damage caused in terms of health, relationships, social commitments and legal implications

One of the key factors in building up effective, meaningful dialogues with young people about their health behaviours and the decisions they make about drug use is the ability to understand what motivates the different types of drug use and the subjectively positive, desired outcomes as well as the negatives. Responses which ignore the significance of the peer group and the subjective pleasures derived from drug use by young people are unlikely to have any impact in terms of education and prevention.
As with all sub-cultures, including youth cultures, young people’s drug use has its own lexicon of slang terms for substances, paraphernalia and associated behaviours. This could be seen to present an obstacle to adults working with young people as their apparent lack of vernacular drug terms may appear to undermine both teachers’ effectiveness and credibility.

The challenge is how to capture the meaning, nuance and intonation of words and phrases used by the young people you work with. However, as with all dictionaries of slang, the problem is that once a phrase has been dignified by print, its usage and meaning will often change and be replaced by a new term. With this in mind, the best advice is to look to the source.

You are far less likely to undermine your credibility by asking pupils you teach to explain the phrases and slang-terms they use than if you misuse a slang term appropriated from youth culture by the adult world. Another advantage of adopting this approach is that it affords an opportunity to explore the depth and range of the pupils’ drug knowledge which can assist the teacher in determining the appropriate level of drug education.
When discussing drug use it is important to consider the different factors that influence the effects of use. The following diagram shows the three factors at play which impact on all stages of drug use. Another area to consider when discussing drug use is the interrelatedness of the wide range of drug-related factors that can influence attempted or completed suicide.
**The Epidemiological Triangle of Drug Use**

**DRUG FACTORS**
- What drug (or drugs) is taken?
- Is the drug a stimulant, opiate, sedative or hallucinogen?
- How is it taken?
- How frequently is it used?
- How much is taken?
- What is the strength and purity of the drug?

**PERSON FACTORS**
- Age
- Sex
- Personality
- Users concept of self
- Users beliefs and expectations relating to the drug
- Stage of drug use
- Reasons for use
- Expectations of use

**CONTEXT OR SETTING**
- The social environment within which the drug is taken
- When the use occurs
- With whom use occurs
- The controls on that setting and how these are exercised
- The immediate specific situation
- Motivation for drug use

This model provides a framework for a more nuanced examination of how drug use affects us; it depends on the drug, who is taking it and the context of drug use. So for example, there are very different levels of risk attached to a male adult drinker consuming four bottles of lager in a pub to a 16 year old female consuming the same four bottles of lager at a party.

**Person Factors – Adolescent Development**

“[It's] not that teens are stupid or incapable ... it's sort of unfair to expect them to have adult levels of organisation skills or decision-making before their brain is finished being built.”

Jay Geidd, Neuroscientist, US National Institutes of Health

The drug facts section of the handbook deals specifically with how the different factors identified in the epidemiological triangle impact on individual drug users. However, equal importance must be attached to looking at adolescence itself and how the development of young people's autonomy and distinct identities can influence and impact on a range of behaviours.
The following text has been provided by Dr. Bobby Smith, Consultant Child and Adolescent Psychiatrist, South Western Area Health Board

“Adolescence is one of many stages during the lifecycle. It bridges the gap between childhood and adulthood. During this period, a person moves from a state of major dependence on the family towards a state of being able to operate as an independent functioning adult in society. The key change that permits this progression is a development in cognitive functioning. Children aged seven to eleven years demonstrate a concrete style of thinking, seeing the world in ‘black and white’. By aged twelve, they begin to develop what is termed ‘formal operational thinking’. This permits them to:

- deal with more abstract concepts
- hypothesis
- use logic to solve abstract problems

Adolescents develop a more sophisticated awareness of their own emotional state and, in tandem with this, their capacity to empathise grows as they learn to read and predict the emotional responses of others. They increase in their ability to correctly interpret the social subtleties of both verbal and non-verbal communication.

These psychological or cognitive changes permit the adolescent to develop more sophisticated friendships and greater independence from family. Although family remain important, the relative importance of peer relationships grows. The adolescent acquires a greater sense of their own identity and is faced with the dilemma of choosing the type of person that they want to become. This usually involves experimentation with different images or ways of behaving until they find an identity that ‘fits’. This may involve engaging in some risk behaviour, often with friends. Adult values, of parents and teachers, may be overtly or covertly challenged and opposed. Although often temporarily questioned or discarded, young people tend to return to values that are very similar to their parents’ values by the end of adolescence.

As well as being the site where the adolescent obtains an academic education, school also provides the semi-protected milieu in which the adolescent learns how to interact with peers and the wider world. Experience of a broad range of social situations usually ensures that the adolescent develops a broad range of problem solving styles. They will thus be equipped to cope with an infinite range of complex social circumstances.

In summary, changes occur in brain functioning that permit the adolescent to think in a more abstract manner. These advanced cognitive skills allow the adolescent to interact with the world in a more independent manner.
Increased interaction with a widening world provides the adolescent with the opportunity to practice how to best use their new cognitive skills. Learning how to use these skills then permits them to effectively and independently function in the complex social world of adults.

In early adolescence, the adolescent will often use an avoidant coping style when faced with social difficulty, e.g. retreating into their bedroom and listening to loud music when facing difficulties with peers or family. Later in adolescence, the same problems are likely to be dealt with in a more proactive manner, e.g. talking directly to their peer or seeking the assistance of an intermediary to negotiate difficulties with parents.

Just as infants vary greatly in the pace at which they learn to walk and talk, adolescents acquire the competencies necessary for effective adult functioning at very different rates. Normal development by an adolescent can be influenced by both intrinsic and extrinsic factors. Intrinsic factors include a delay in the brain changes that permit the ‘formal operational thinking’ described above. Extrinsic factors include lack of opportunity in one’s own environment to practice using the newly acquired cognitive skills in a variety of social settings. This could happen in situations where a young person had minimal contact with peers due to being unable to attend school.

Substance use may form part of the repertoire of risk behaviours in which adolescents tend to engage. They may be curious about how substances will affect their behaviour or thinking. Alcohol and drugs can induce a very wide range of feelings. For example, they can induce a sense of calmness, increase energy, enhance confidence or alter the way in which sensations are experienced. The adolescent may experience such phenomena as pleasant or unpleasant. Some adolescents may turn to drugs or alcohol as an avoidant method of coping with life’s difficulties. They may choose alcohol or drug intoxication as a method ‘to switch off’ or ‘to make problems go away’.

Regular use of drugs or alcohol will reduce the opportunity for the adolescent to learn alternative problem solving strategies. If their drug or alcohol use causes them to finish education early, their difficulties may be compounded, as they will miss out on the healthy social learning environment which school provides. This may further reduce their ability to acquire and develop the adaptive coping strategies and social problem solving styles that are necessary for healthy adult functioning in society.

Adolescents who are slower to develop the complex social skills necessary to interact effectively with peers and the wider world are also more at risk of turning to drug or alcohol use. They may use alcohol or drugs to mask their anxiety in social situations or they may use these substances in an attempt to demonstrate their ‘maturity’ to peers. However, it would be wrong to assume
that a ‘lack of confidence’ is a universal problem among teenagers who use drugs. Indeed, a personality profile that includes excessive confidence, sensation seeking and substantial risk taking is also associated with progression to drug misuse. Problematic drug or alcohol use therefore demonstrates a complex interaction with normal adolescent development. Atypical patterns of development may place a teenager more at risk of addiction. Conversely, drug and alcohol misuse can themselves cause a delay in, or a deviation from, normal adolescent development. As a drug or alcohol problem grows, the young person is likely to find himself or herself in a progressively more deviant environment, e.g. in the company of delinquent peers, out of school or in prison. These environments promote a social interactional style that is likely to perpetuate a further delay in the acquisition of the skills appropriate to survival in ‘mainstream society’. These issues highlight the potentially massive damage which problematic drug use can inflict on a young person during this crucial stage of development.”

Context Factors – Alcohol

“With approximately 95,000 alcohol dependents … most Irish people have more to fear from legal drugs and medicines than from illegal drugs.”

When considering the context or setting factors in Ireland, particular emphasis has to be given to the position of alcohol in our society. Young people’s attitudes and behaviours in relation to alcohol cannot be considered in isolation to how alcohol is used and mis-used in the adult world – the reality is that alcohol use and misuse is part of the same continuum for both young and old. Our tolerance and ambiguity towards alcohol is at variance with many Mediterranean countries where drunkenness is seen as a source of great shame and embarrassment. However, in Ireland episodes of drunkenness, for adults and adolescents of both genders, are routinely recounted with pride. This is one particular facet of our alcohol culture which needs to be challenged through drugs education. Binge drinking and its consequences are not a necessary rite of passage which adolescents must go through to mark their status as emerging adults, rather it is a feature of our social landscape. Changing this aspect of our drinking behaviour means challenging the attitudes in adults and young people as to its desirability. Social, Personal and Health Education (SPHE) provides both the space and the methodologies within the school context to carry out this type of discourse with young people. From a preventative perspective, the other issue to consider is both the ready availability of alcohol and the linked issue of the lack of social events and venues for adolescents where alcohol does not feature. Whilst it may be outside of the scope of schools to address these areas directly, they are issues the wider school community (particularly parents) can engage in.

The other issue to be considered from a context perspective is awareness of how adult alcohol use impacts on children and young people. Among the approximate 600,000 people living in the South Western Area Health Board region it is estimated that:
18,000 adults would identify themselves as having a problem with their alcohol use.
2,000 would be known to treatment services.
An additional 60,000 adults and children are directly impacted upon, (with every person who is alcohol-dependent, 5-10 others are seriously affected).\textsuperscript{11}

Again, social ambivalence and tolerance to alcohol can make it difficult to raise the issue of how parental alcohol misuse impacts on children but silence on this issue increases the level of risk for individual children and mitigates against the further development of support and help for adults in this situation.
It is outside of the scope of this handbook to give an in-depth account of the research around the issue of why young people use drugs, however, the following diagram and table, ‘Web of Influence’ and ‘Web of Influence Domains’ present an overview of how this issue can be considered in terms of risk and protective factors. Research shows that there is a complex grid of multiple influences which relate to drug use and other problem behaviours, rather than simplistic single ‘cause and effect’ models.

Those influences which may increase the likelihood of drug use are referred to as risk factors and those which may reduce the likelihood of drug use are referred to as protective factors. The accompanying table identifies the significant factors in each domain.
It is important to note that models like this are not predictors of individual drug use. Just because a young person is surrounded by risk factors, it does not automatically follow that he or she will engage in any of the problem behaviours identified – rather it postulates that there is a higher risk of such behaviours.

**Web of Influence Domains**

**Individual Risk and Protective Factors**
- Biological and Psychological Dispositions
- Attitudes and Values
- Knowledge and Skills
- Problem Behaviours

† Refers to the total complex of external social, cultural and economic conditions affecting a community or an individual.
‡ Refers to the specific geographic location where an individual resides and to the conditions within that particular area.
which in turn interact with

1. **Peer Association Risk and Protective Factors**
   - Norms
   - Activities
   - Bonding

2. **Family Risk and Protective Factors**
   - Function
   - Management
   - Bonding

3. **School/Work Risk and Protective Factors**
   - Bonding
   - Climate
   - Policy
   - Performance

4. **Community Risk and Protective Factors**
   - Bonding
   - Norms
   - Resources
   - Awareness/Mobilisation

5. **Society/Environment Related Risk and Protective Factors**
   - External social, economic and cultural conditions
   - Norms
   - Policy/Sanctions

For a more detailed discussion of risk and protective factors recommended reading would be Dr. Mark Morgan’s *Drug Use Prevention – An Overview of Research* published by the National Advisory Committee on Drugs in 2001. In particular, the second chapter of the book critically examines a number of models seeking to explain substance use.
The aim of the following section is to provide a basic understanding of how drugs are taken, what are the desired effects of their use and the short and long-term effects associated with their use.

As with the previous section, it is important to note that the following information is aimed at an adult audience in order to build their capacity to engage with young people in drugs education and prevention work in the school setting and, as such, is not a resource to be given out to students in an unmediated fashion.

Engaging young people in discussion around drug facts should always be done in a way which is

(i) developmentally appropriate
(ii) in accordance with the curriculum being used
(iii) in accordance with the school’s substance policy

The information is organised around the following headings:

- Name
- Physical Description(s)
- Administration
- Desired Effects
- Duration of Effects
- Signs and Symptoms of Use
- Short Term Risks
- Long Term Risks
- Legal Status
All drugs are viewed in terms of both their desired effects and their associated short and long-term risks. This emphasis on risk, as opposed to distinctions between so-called ‘soft’ and ‘hard’ drugs is because the risks involved in drug use are not located purely within the drug itself but rather, how the drug is used, how much is used, who uses it and where – as discussed earlier in the section on the epidemiological triangle. Equally, the soft/hard distinction can also be used to build an argument as to which drugs (i.e. ‘soft’ ones) are ‘safer’ to use, again side-stepping the issue around the risks associated with any drug use by young people.

Drugs and the Law

Drug laws in Ireland are complex and subject to change and schools are advised to be proactive in developing a good working relationship with local Gardaí as they will be able to clarify issues relating to drug laws.

The laws that are the most relevant to the school setting include the Misuse of Drugs Acts 1977 and 1984.

The Misuse of Drugs Acts are intended to prevent the non-medical use of drugs. The drugs included are known as Controlled Drugs and include opiates (e.g. heroin), sedatives (e.g. valium), stimulants (e.g. amphetamines) and hallucinogens (e.g. LSD). Offences under the Misuse of Drugs Act include:

- Possession of any small amount for personal use
- Possession with intent to supply to another person
- Production
- Supplying or intent to supply to another person
- Importation or Exportation
- Allowing premises you occupy to be used for the supply or production of drugs or permitting the use of drugs on premises
- Growing of opium poppies, cannabis and coca plants
- The printing or sale of books or magazines that encourage the use of controlled drugs or which contain advertisements for drug equipment

There are other laws controlling tobacco, alcohol, solvents and medicines. In the following section we touch on the legal status of the various drugs but we would again re-iterate the importance of discussing this with your local Garda Juvenile Liaison Officer if you have queries or concerns.

Equally, drugs, their various uses and our understanding of them change over time. With this in mind, there is a list of organisations and websites at the end of this handbook which you can consult if you encounter substances or related behaviours not included in the following section.
Physical Description(s):

Tobacco is available as four different products in Ireland:

- Manufactured cigarettes in packets of 10 or 20, with various levels of tar, legally limited to a maximum of 12mgs tar per cigarette
- Loose tobacco for hand-rolled cigarettes
- Cigars, made from the darker, stronger tobacco leaf, available in a variety of sizes, which may contain up to 40mgs of tar
- Pipe tobacco, similarly made from darker tobacco leaves

Administration:

Obviously, tobacco is smoked, with manufactured cigarettes being the most prevalent product used. Tobacco use also figures in cannabis smoking, where cannabis users may use tobacco along with the crumbled cannabis resin in the production of a joint or spliff (hand-rolled cannabis cigarette).

Tobacco can also be administered via smokeless products such as snuff, which is sniffed, or ‘dipped’ that is, held between the lip and the gum of the mouth. Under Section 6 of the Tobacco (Health Promotion and Protection) Act 1988 the importation and distribution of these smokeless products are banned due to concerns around their adverse effects on health.
Desired Effects:

The psychological effects of tobacco smoking from smokers’ self-reports indicate that

- Smoking acts as a mood regulator and may increase pleasure.
- Smoking acts as a source of relief in highly stressful situations and periods of strong emotion.
- Smoking reduces aggression and irritability.
- Smoking tobacco increases performance and concentration on minor tasks as nicotine is known to stimulate memory and alertness enhancing cognitive skills particularly in relation to speed, vigilance, reaction time and work performance.

From a physiological perspective, nicotine (which is the principal toxic constituent of smoking), due to its stimulant properties, increases:

- heart rate
- blood pressure
- respiration

The other widely observed physiological effect is on the appetite

- “… also tends to be an appetite suppressant, specifically decreasing the appetite for sweets and inhibiting the efficiency of food metabolism”.

Duration of Effects

Inhaled cigarette smoke can reach peak levels in the bloodstream rapidly with speedy distribution of nicotine throughout the body. It reaches the brain within 10 seconds of inhalation. However, the acute effects of nicotine dissipate within a few minutes and nicotine disappears from the body in a few hours, as it is metabolised fairly rapidly. This explains why many smokers report that the first cigarette of the day, after a night’s sleep, is the most pleasurable.

It is the combination of the mode of administration (smoking) and nicotine’s highly addictive properties (the World Health Organisation ranks nicotine as being more addictive than heroin, cocaine, alcohol, cannabis and caffeine which impact on the number of dependent users. “What people frequently do not realise is that the cigarette is a very efficient and highly engineered drug-delivery system. By inhaling, the smoker can get nicotine to the brain very rapidly with every puff. A typical smoker will take 10 puffs on a cigarette over a period of five minutes that the cigarette is lit. Thus, a person who smokes about one and a half packs (30 cigarettes) daily gets 300 ‘hits’ of nicotine to the brain each day.”

When one stops smoking, after only 20 minutes, circulation in one’s hands and feet improves making them warmer, blood pressure and pulse drop back to normal levels. Within eight hours of stopping, oxygen in the blood increases to normal levels and carbon monoxide levels in the blood drop to normal. Twenty-four hours after stopping, the risk of sudden heart attack decreases and by 48 hours, one’s sense of taste and smell begin to return to normal. The cravings for a cigarette, often frequently experienced in the first few days of quitting, last for a period of around 3 to 5 minutes.
Signs and Symptoms of Use

The most obvious sign of use is the smell of tobacco: on the breath of the user, in his or her hair, on their hands and in the fabric of their clothes. Long-term use will result in a staining of the teeth and possibly of the fingers and nails.

Short Term Risks

Although nicotine is highly toxic (like cyanide, if a sufficient amount is ingested, death can result in a few minutes from respiratory failure caused by paralysis\textsuperscript{23}) there is a tendency to associate the health risks related to smoking with long-term use.

However, outside of the immediate impact smoking may have on a young person in terms of the smell of tobacco and the cost, there are short-term adverse health effects:

- Increased risk of dependence – those who start smoking regularly when young tend to carry on smoking throughout their adult life, most … adults who smoke began during adolescence.\textsuperscript{24}
- Smoking has an impact on physical fitness both in terms of performance and endurance:
  - It can impact on the rate of lung growth and the level of lung function – this means that the amount of oxygen available for muscles is reduced.
  - Young people who smoke regularly will have more frequent and severe respiratory illnesses.\textsuperscript{25}
  - Regular adolescent smokers are:
    - "2.4 times more likely than their non-smoking peers to report poorer overall health.
    - 2.4 to 2.7 times more likely to report cough with phlegm or blood, shortness of breath when not exercising and wheezing or gasping.
    - 3 times more likely to have seen a doctor or other health professional for an emotional or psychological complaint."\textsuperscript{26}
- All of the carbon monoxide, 90% of the nicotine and 70% of the tar in tobacco smoke is retained in the lungs when inhaled.\textsuperscript{27}
- Decreased sense of taste and smell.

Outside of these short-term health risks, adolescent tobacco use is “… often the first drug used by young people who use alcohol, marijuana and other drugs.”\textsuperscript{28}
Long Terms Risks

The increased risk of lung cancer is the risk predominantly associated with smoking. However, long-term exposure to nicotine increases the risk of:

- Heart disease
- Heart attack
- Blood clots
- Strokes
- Bad circulation
- Ulcers
- Lung infection
- Bronchitis
- Emphysema
- Cancers of the mouth and throat

How Smoking Affects Your Body

Your throat – you will produce twice as much phlegm as someone who doesn’t smoke. You will cough more and if you have asthma, have more attacks.

Your heart has to work harder, it will beat two to three times faster than someone who doesn’t smoke.

There are also the adverse, long-term health effects like Lung Cancer, Throat Cancer, Stomach Cancer, Heart Disease and Bronchitis.
Equally, smoking impacts on both male and female fertility – decreased fertility is associated with women who smoke and wish to start a family and the risk of impotence is 50% higher in male smokers than in non-smokers. Furthermore, the adverse impact of maternal tobacco use during pregnancy on the foetus is well documented. There is evidence of an increased risk of a premature birth, stillbirth and early death of the newborn baby where the mother smokes more than five cigarettes a day and infants born to mothers who smoked throughout pregnancy also have a lower birth weight.

The other risk to consider is ‘passive smoking’ – from the inhalation of sidestream smoke (as opposed to mainstream which is normally filtered) or environmental tobacco smoke. Being unfiltered, the smoke contains:

- 70% more tar
- 2.5 times more carbon monoxide
- 2.7 times more nicotine
- 100 times more carcinogenic compounds

and “… there is increasing evidence that passive smoking is a major cause of premature death in non-smokers.” For children, this increases the risks of asthma and other respiratory illnesses and ‘glue’ or middle ear disease.

**Legal Status**

Health Act 2001 prohibits the sale of tobacco to young people under the age of eighteen years.

**Harm Reduction Approaches**

There are no ‘safe or safer’ tobacco products and given the adverse health effects of any tobacco product non-smoking is the only safer option.
Alcohol

Physical Description

Alcohol and its use is so deeply engrained into our social and cultural environment that it may appear counter-intuitive to have to describe it. However, this over familiarity with alcohol poses in itself an enormous challenge for the promotion of healthier life-styles. Given the prevalence of alcohol use in Ireland, “83% of men and 74% of women reported alcohol consumption in the last month (and) … 40% of school-going young people reported never having had an alcoholic drink…”[33], the need to develop a better informed, critical discourse around alcohol and its use is crucial.

Alcoholic drinks can be divided into six different categories: beers, cider, table wines, fortified wines, distilled spirits and liqueurs. What they have in common is that they mainly consist of ethanol and water. Ethanol is produced as a result of the fermentation by yeasts of sugars from fruits, vegetables or grain[34] and it is the difference in production methods and ingredients which brings about the different tastes and strengths. For example, beer is produced by the fermentation of brewer’s wort, with hops added for flavour. This results in an alcoholic drink which is approximately five parts ethanol to 100 parts water; as opposed to whiskey which is produced by the distillation of fermented barley, rye or corn mash, which can contain as much as 50% ethanol.

The following table[35] presents the six different categories of drink, the types within each category, their alcohol content and examples of “standard drink” equivalents for each type. A standard drink equals 10gms of pure alcohol and is the measure similar to “units” which is now used in the Royal College of Psychiatrists’ guidelines to sensible drinking. The upper recommended limit per week is 21 standard drinks for adult males and 14 standard drinks for adult females.
Alcohol Content

**Drink Type % by volume Standard Drink =**

<table>
<thead>
<tr>
<th>Drink</th>
<th>Type</th>
<th>Alcohol Content</th>
<th>Standard Drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beers</td>
<td>Lager</td>
<td>3-6</td>
<td>½ pint of ordinary strength beer (3.5%) = 1 standard drink</td>
</tr>
<tr>
<td></td>
<td>Ale</td>
<td>3-8</td>
<td>500ml can of strong beer (6-7% alcohol) = 3 standard drinks</td>
</tr>
<tr>
<td></td>
<td>Stout</td>
<td>4-8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special brews</td>
<td>7-9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(stronger beers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cider</td>
<td></td>
<td>3.5-13.5</td>
<td>Flagon of cider may equal up to 10 standard drinks</td>
</tr>
<tr>
<td>Table Wines</td>
<td>Red, White, Rose</td>
<td>8-14</td>
<td>125ml glass of wine = 1 standard drink</td>
</tr>
<tr>
<td></td>
<td>Champagnes</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Fortified Wines</td>
<td>Sherry, Port, Madeira, Vermouth</td>
<td>15-20</td>
<td>70ml glass of sherry or port = 1 standard drink</td>
</tr>
<tr>
<td>Distilled Spirits</td>
<td>Brandy</td>
<td>40-55</td>
<td>1 single measure, 35.5ml of spirits = 1 standard drink</td>
</tr>
<tr>
<td></td>
<td>Whiskey</td>
<td>40-50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rum</td>
<td>40-75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vodka</td>
<td>35-50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gin</td>
<td>35-50</td>
<td></td>
</tr>
<tr>
<td>Liqueurs</td>
<td>Benedictine, Chartreuse, Kirsch</td>
<td>25-55</td>
<td>1 single measure, 50ml (approx.) may equal 1-1.5 standard drinks</td>
</tr>
</tbody>
</table>

**Desired Effects**

Alcohol is a central nervous system (CNS) depressant which affects the:

- respiratory rate
- heart rate
- control mechanisms in the brain

The effects on CNS depression may include:

- reduction of inhibitions which may lead to embarrassing/dangerous behaviour
- reduction in anxiety
- decreased attention span
- impaired short-term memory
- impaired motor coordination
- prolonged reaction time
- less rapid thought processing
- impaired ability to perform complex tasks (such as driving)\(^6\)

Alcohol is often thought of as a stimulant rather than a depressant, as its disinhibiting effects tend to make users more animated and excitable; however, as more alcohol is consumed, the depressant effects become more pronounced.\(^7\)
Another model\textsuperscript{38} presents the impact of alcohol use in five stages, illustrating the increasing impact of alcohol on the individual.

<table>
<thead>
<tr>
<th>No. of Standard Drinks Consumed</th>
<th>Behavioural, Physiological and Psychological Changes</th>
</tr>
</thead>
</table>
| Approximately 2 standard drinks | - Feel relaxed  
|                                  | - Less inhibited  
|                                  | - More talkative                                        |
| Approximately 3 standard drinks | - Co-ordination begins to diminish  
|                                  | - Judgement begins to diminish  
|                                  | - Decision making skills begin to diminish               |
| More than 3 standard drinks      | - Staggering  
|                                  | - Double vision  
|                                  | - Obvious drunkenness  
|                                  | - Unconsciousness                                        |

The effects described above are variable and dependant on a number of different factors.

<table>
<thead>
<tr>
<th>Factors Impacting on the Mood Altering Effects of Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of drink</td>
</tr>
<tr>
<td>- alcohol content</td>
</tr>
<tr>
<td>- carbonated or effervescent alcoholic drinks are absorbed faster</td>
</tr>
<tr>
<td>How quickly it is drunk</td>
</tr>
<tr>
<td>- it takes approximately an hour for the alcohol in a standard drink to be broken down by the liver. If alcohol is consumed at a faster rate than it can be broken down, alcohol remains in the bloodstream and blood alcohol concentration rises</td>
</tr>
<tr>
<td>When food was last eaten</td>
</tr>
<tr>
<td>- approximately 90% of the alcohol drunk is absorbed by the small intestine and the amount and type of food in the stomach will impact on the rate of absorption.</td>
</tr>
<tr>
<td>- high carbohydrate and high fat foods decrease absorption rates</td>
</tr>
<tr>
<td>Bodyweight or build</td>
</tr>
<tr>
<td>- physiological differences between the sexes means that the majority of women will become more intoxicated than men and have higher blood alcohol concentration (BAC) with the same consumption of alcohol</td>
</tr>
<tr>
<td>- women break down alcohol at a different rate to men due to a smaller amount of a particular enzyme in the stomach – the same dose of alcohol will produce a 25-30% higher BAC in women then men</td>
</tr>
<tr>
<td>- women have lower body water content due to lower muscle content and a higher ratio of fat therefore they will tend to have higher BAC</td>
</tr>
</tbody>
</table>
the drinker

- tolerance levels
- emotional/psychological health
- body weight: the same amount of alcohol will have a greater impact on a slight person than on a heavy person
- the speed with which alcohol is consumed. If alcohol is drunk quickly, this leads to a greater concentration of alcohol in the bloodstream

the surroundings of the drinker

- the environment in which the alcohol is consumed can contribute to the effects and amount of alcohol drunk in terms of the social norms and controls at play in any given situation.
- for example, it has been observed that the design of so-called ‘super pubs’ – large bars specifically targeting younger drinkers are conducive to more alcohol being consumed more quickly

Duration of Effects

- Within five to ten minutes of alcohol being consumed the effects start.
- The effects peak approximately 40 to 60 minutes after consumption.
- The alcohol consumed remains in the drinker’s bloodstream until it is broken down by the liver at a rate of approximately 1 standard drink (such as a ½ pint of ordinary strength lager or 125ml glass of wine) an hour. This is the only way to sober up; approaches such as drinking black coffee, getting fresh air, taking cold showers or getting sick (in the mistaken belief that it will clear the stomach of alcohol) have no effect on a drinker’s blood alcohol level.

Signs and Symptoms of Use

See above.

Short Term Risks

Childhood and adolescence are periods of growth and development and, as with all drugs, this makes young people particularly vulnerable to adverse short-term effects arising from alcohol use. The combination of physical immaturity and the ongoing development and refinement of values and attitudes, choice and decision making skills, personal and social skills.39

With the introduction of a drug which impacts on physical co-ordination and inhibitions, judgement and decision-making skills lends itself to a range of adverse risks.
The other short-term risk to consider is the use of alcohol with other sedative drugs, which exaggerates the effects of both drugs and may cause an overdose. Other sedative drugs would include:

- Solvents
- Allergy medicines
- Cough and cold medicines
- Benzodiazepines and tranquillisers
- Heroin and methadone

**Long Terms Risks**

As referred to earlier, 21 standard drinks and 14 standard drinks spread over the course of a week are the recommended limits for men and women respectively. For women, up to 35 standard drinks would indicate an increasing risk, with more than 35 standard drinks being considered harmful alcohol use. The equivalent figures for men are up to 50 standard drinks increasing risk and more than 50 drinks leading to harmful alcohol use.

There is a wide range of long term risks associated with heavy and prolonged use of alcohol.
Problems associated with regular heavy drinking:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Social</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain damage</td>
<td>Family problems</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Cirrhosis</td>
<td>Divorce</td>
<td>Changes in personality</td>
</tr>
<tr>
<td>Cancer of mouth, larynx, oesophagus</td>
<td>Fraud</td>
<td>Amnesia</td>
</tr>
<tr>
<td>Cancer of breast</td>
<td>Financial difficulties</td>
<td>Depression</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>Habitual conviction</td>
<td>Hallucinosis</td>
</tr>
<tr>
<td>Diabetes</td>
<td>for drunkenness</td>
<td>Dementia</td>
</tr>
<tr>
<td>Fatty liver</td>
<td>Work difficulties</td>
<td>Misuse of other drugs</td>
</tr>
<tr>
<td>Foetal damage</td>
<td>Vagancy</td>
<td>Gambling</td>
</tr>
<tr>
<td>Gastritis</td>
<td></td>
<td>Delirium tremens</td>
</tr>
<tr>
<td>Hepatitis</td>
<td></td>
<td>Vagrancy</td>
</tr>
<tr>
<td>Haemopoietic toxicity</td>
<td></td>
<td>Gambling</td>
</tr>
<tr>
<td>Infertility</td>
<td></td>
<td>Delirium tremens</td>
</tr>
<tr>
<td>Neuropathy</td>
<td></td>
<td>Vagrancy</td>
</tr>
<tr>
<td>Nutritional deficiencies</td>
<td></td>
<td>Unemployment</td>
</tr>
<tr>
<td>Obesity</td>
<td></td>
<td>Attempted suicide</td>
</tr>
<tr>
<td>Pancreatitis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raised blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactions with other drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strokes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual dysfunction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legal Status

The following has been taken directly from the website of the Health Promotion Unit within the Department of Health & Children.†

The laws relating to the sale, consumption and use of alcohol in this country are complex. This is an overview of some of the provisions, and should not be taken as a definitive statement.

The Intoxicating Liquor Acts of 1988, 2000 and 2003 are the main pieces of legislation and provide for the following:

Under 18s:

- It is an offence for a person under 18 to purchase alcohol.
- It is an offence for a person under 18 to represent themselves as being over 18 in order to obtain alcohol.
- It is unlawful for a person under 18 to consume alcohol except with the explicit consent of their parent/guardian in a private residence in which they are present as of right of with permission.
- Children under 15 may be in the bar‡ of a licensed premises only if accompanied by a parent/guardian, but not after 9 pm.
- Young people aged 15-17 may be in the bar of a licensed premises unaccompanied, but not after 9 pm.
- Children under 15 accompanied by a parent of guardian may be in the bar of a licensed premises after 9 pm if attending a private function where a substantial meal is served, e.g., a wedding reception, as can young people aged 15-17 years.

† http://www.healthpromotion.ie/topics/alcohol/alcofacts/the_law_and_crime/
‡ “Bar” is defined in the Intoxicating Liquor Act, 2003, as “any open bar or any part of licensed premises exclusively or mainly used for the sale and consumption of intoxicating liquor and includes any counter or barrier across which drink is or can be served to the public;”
• Persons under 18 may not be in the part of a licensed premises to which an exception order applies during the time an exemption order is in force.
• Restrictions on the presence of under 18s in bars of licensed premises do not apply to the children of the licensee, persons residing in the licensed premises or persons employed in the licensed premises.
• The defence that the licensee had “reasonable grounds” for believing that the person concerned was over the age of 18 years was removed by the 2000 Act. The removal of the “reasonable grounds” defence requires the licensee to ensure that intoxicating liquor is supplied only to those who are legally entitled to purchase or consume it on licensed premises. This places a much greater onus on the licensee to demand proof of age.
• Premises will be closed for up to 7 days on conviction for a first offence, and up to 30 days for 2nd and subsequent offences.
• Persons under 18 may not be in a premises used exclusively or mainly as an off-license at any time unless accompanied by a parent/guardian.
• Young people aged 16 and 17 may be employed as lounge staff, but may not serve from behind the bar.

The Intoxicating Liquor Act, 2003, can be downloaded at www.justice.ie

**Criminal Justice (Public Order) Act 1994**

• It is an offence for a person to be intoxicated (this refers to alcohol and other psychoactive substances) in a public place to such an extent as to be a danger to themselves or others.
• Gardaí can seize any bottle or container that they have reasonable cause to suspect contains an intoxicating substance.
• It is an offence to drive under the influence of alcohol and, since January 1994, it is an offence to drive with more than 80mg of alcohol per 100ml of blood.⁴⁴

**Risk Minimisation:**

For any novice drug user, the lack of understanding and experience of how specific drug use will impact on him or her is in itself a source of risk to their health and safety. The following presents a range of practical strategies which can be used to minimise the risks associated with alcohol use:⁴⁴

<table>
<thead>
<tr>
<th><strong>Pace your consumption</strong></th>
<th>It is safer to drink over a few hours rather than to consume alcohol quickly.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Take smaller sips</strong></td>
<td>As well as spacing your alcohol use over a few hours, slow down the rate at which you drink. Smaller sips, less often gives your body a chance to deal with alcohol.</td>
</tr>
<tr>
<td><strong>Know your limit</strong></td>
<td>Know your limit (how much you can safely drink without experiencing problems) and stick to it.</td>
</tr>
<tr>
<td><strong>Know how much you are drinking</strong></td>
<td>Drinks measures are not universally consistent. The situations young people often use alcohol in are not conducive to standard pub measures. Adolescent drinkers need to understand how to calculate the number of standard drinks there are in the types of measures they may be drinking.</td>
</tr>
<tr>
<td><strong>Eating before you drink</strong></td>
<td>If you eat before you go drinking, particularly food high in carbohydrates and/or fat, alcohol will be absorbed at a slower rate than on an empty stomach.</td>
</tr>
<tr>
<td><strong>Drink for the taste</strong></td>
<td>If you don’t like the taste of a drink, don’t drink it.</td>
</tr>
<tr>
<td>Topic</td>
<td>Points</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Good and bad mixers</td>
<td>If you drink spirits, dilute them with non-alcoholic mixers and ideally with more mixer than spirit.</td>
</tr>
<tr>
<td></td>
<td>Be careful using high caffeine mixers, (some of the sports/fitness drinks) their stimulant action combined with the disinhibiting properties of alcohol, can lead to problematic behaviour.</td>
</tr>
<tr>
<td></td>
<td>Try not to mix different types of alcoholic drink – this can make it harder to keep track of the amount of alcohol being consumed.</td>
</tr>
<tr>
<td>Spacers not chasers</td>
<td>A spacer is a non-alcoholic drink taken in between alcoholic ones.</td>
</tr>
<tr>
<td></td>
<td>A spacer helps you to re-hydrate (alcohol blocks an antidiuretic hormone in the pituitary gland increasing urination) and gives your body a chance to cope better with the alcohol.</td>
</tr>
<tr>
<td>Occupy yourself</td>
<td>Don’t just drink – do something you enjoy, like talking, listening to music or reading.</td>
</tr>
<tr>
<td>Mind yourself</td>
<td>Drinking on your own or using alcohol to deal with problems isn’t a great idea.</td>
</tr>
<tr>
<td></td>
<td>Alcohol can’t solve problems or offer any insight into how you can deal with them.</td>
</tr>
<tr>
<td>Mind your mates</td>
<td>Alcohol consumption can make people vulnerable to a whole range of short-term risks. If you see your friends getting into trouble when they are drunk, help them. If you are concerned about their physical well-being, call an ambulance.</td>
</tr>
<tr>
<td>Avoid getting into rounds</td>
<td>The ‘round system’ can mean you end up not only drinking more than you planned to but also spending more.</td>
</tr>
<tr>
<td></td>
<td>If you do drink in rounds, it is an idea to skip alcohol on your round and have a spacer instead.</td>
</tr>
<tr>
<td>Don’t drink and drive</td>
<td>Alcohol and cars don’t mix. In Ireland it is estimated that alcohol is associated with at least: 30% of all road traffic accidents and 40% of all fatal accidents.¹⁵</td>
</tr>
<tr>
<td></td>
<td>A driver is 10 times more likely to have an accident at the current legal limit of 80mg/100ml – most drinkers could reach this BAC after 4 standard drinks or 2 pints of ordinary strength beer. However, a 17 year old male who has a BAC between 70 and 100mg/100mls has 40 times more risk of an accident than a 17 year old who has not been drinking.¹⁶</td>
</tr>
<tr>
<td>Don’t drink</td>
<td>In the 2003 Irish Health Behaviour in School-Aged Children Survey, 31% of boys and 30% of girls reported being ‘really drunk’.⁴⁷ Although there are well founded concerns about the prevalence of alcohol use by adolescents it is important not to assume that all young people drink alcohol.</td>
</tr>
<tr>
<td></td>
<td>Within any group there is likely to be a spectrum of alcohol-related behaviours which will probably include not drinking or rarely consuming. Given the significance of peer networks and peer influence on young people’s health behaviours this can be an important resource when challenging perceptions of universal alcohol use.</td>
</tr>
</tbody>
</table>
Solvents

Physical Description(s)

Solvent misuse, often referred to as ‘glue sniffing’, occupies a curious place in the pantheon of substances used and misused. As with much illicit substance use, it is particularly difficult to establish the prevalence of solvent misuse due in no small part to the fact that it is a practice predominantly associated with children and young people. Yet the range of products containing the chemical vapours which can be inhaled are an everyday part of our domestic, school and workplace settings.

There are four broad categories of volatile substances or inhalants:

- **Volatile Solvents** – these are liquids which vaporise at room temperature and can be found in a range of house-hold and industrial products. These include:
  - Paint thinners and removers
  - Dry cleaning fluids
  - Petrol
  - Glues
  - Correctional fluids
  - Felt-tip marker pens

- **Aerosols** – these are spray cans which contain propellants and solvents and include:
  - Spray paints
  - Deodorants
  - Hair sprays
  - Vegetable oil sprays used in cooking
  - Fabric protector sprays
Gases – these include medical anaesthetics such as ether, chloroform and nitrous oxide. The more frequently available domestic products which contain gases include

- Butane lighters
- Propane gas cylinders

Nitrites – the key difference between nitrites and the substances in the previous categories is that unlike them, nitrites do not act on the central nervous system. Nitrites primarily dilate blood vessels and act as a muscle relaxant. It has a number of clinical applications, including treating cyanide poisoning and can also be used to treat angina attacks. Amyl and butyl nitrite use is associated with the promotion of disinhibition whilst dancing and as a muscle relaxant during sex and are available as ‘poppers’ through clubs and sex shops.

Administration

All of the above are administered by inhalation, with the product design dictating how this is achieved.

- Aerosol products are sprayed directly into the mouth or the nose.
- Substances such as glue are deposited into a plastic bag or crisp packet, the opening of which is sealed around either the mouth or both nose and mouth by the user’s hands and the fumes are inhaled.
- The product is applied to a piece of material such as a rag, sleeve or lapel, cotton wool or a pillow and inhaled from them.
- The vapours are directly inhaled from the product’s container.

Desired Effects

The initial effects of solvent misuse are very similar to those produced by alcohol. These may include:

- Euphoria
- Dizziness
- Light-headedness
- Visual and auditory hallucinations, ranging from pleasant to unpleasant
- Delusions, such as believing one can fly

Duration of Effects

The inhaled vapours are rapidly absorbed through the lungs into the blood stream and, from there, to the brain and other organs. However, the mood altering effects diminish as quickly as they peak, disappearing within a couple of minutes to half an hour. This brevity may in turn lead to users seeking to extend the high through repeated inhalations over several hours which may lead to depression of the nervous system and unconsciousness. The limited duration of the effects of solvent misuse is a challenge in identifying those abusing solvents. However, the smell of the solvent inhaled may remain on the breath for up to a day.
**Signs and Symptoms of Use**

Given the availability of products which can be misused, (“... one study suggested that the average home could contain up to 30 of these products ...”[51]) and the limited duration of effects, it can be a challenge to identify someone abusing solvents. Although some of the following symptoms may be more appropriately associated with a serious solvent misuse problem, their absence does preclude experimental or sporadic use.

- Chemical odours on the user’s breath or clothing
- Paint or other stains on the face, hands or clothing
- Spots, boils or a red ring around the mouth and nose
- Persistent cough, runny nose and eyes
- Drunk and disoriented appearance
- Hallucinations
- Fixed stare, blurred or double vision
- Slurred speech
- Nausea or loss of appetite
- Inattentiveness, lack of co-ordination, irritability and depression
- Erratic behaviour
- Evidence of use arising from discarded paraphernalia – solvent soaked/stained rags or clothing; empty solvent containers, aerosols or related products[52]

**Short Term Risks**

The modes of administration, concealed nature of use and the unpredictability of solvents themselves, combine to create a range of risks, not least of which is sudden death. Surveys of newspaper reports indicate that butane gas is implicated in most of the recorded deaths “…followed by aerosols and typewriter correcting fluid. Glue has apparently been implicated in only one death in the past few years.”[53]

Death can be caused by:

- Heart failure, where the misused substance is gas, aerosols or typewriter correcting fluid and if “…the user becomes stressed or engages in strenuous physical activity such as running away …”[54]
- Fatal injury arising from accidents while intoxicated, with the risk increasing if misuse happens in a potentially dangerous environment such as “…high buildings, derelict sites, railway embankments, river or canal banks.”[55] In such circumstances, solitary use will increase the level of risk as, if the user experiences difficulties, there is no one to offer assistance or call for help.
- There is a risk of choking associated with the inhalation of vomit after use.
- Asphyxiation from repeated inhalations leading to “…high concentrations of inhaled fumes displacing oxygen in the lungs.”[56]

The short-term risks associated with solvent misuse include:

- Unpleasant auditory and visual hallucinations
- Impaired judgement which may lead to aggressive and uncharacteristic behaviour, particularly if alcohol is used in conjunction with the volatile substance
- A hangover, often described as less severe than an alcohol induced one, which features poor concentration and headaches[57]
For nitrite poppers side effects include:

- Severe headache, rapid heartbeat and low blood pressure
- Acute psychosis (hallucinations, usually auditory and delusions), coma and, in rare cases, sudden death

Long Terms Risks

The literature describing long-term risks is less conclusive and points towards some chronic users experiencing damage to the heart, brain, kidneys and liver. With solvent use, there is the potential for dependence but the reality is that, for most young people, solvent use happens within the context of the peer group and is not sustained. Long-term, habitual use of solvents will see the development of tolerance and an increase in the amount of solvents inhaled. Side effects from regular use may include:

- Disturbed sleep patterns
- Loss of appetite
- Loss of weight
- ‘Glue sniffer rash’ due to the ongoing application of plastic bags to the face, especially around the nose and mouth

Side effects from long-term use include:

- Depression
- Being moody and suspicious
- Being forgetful with a diminished ability to concentrate which will obviously impact on school performance

These problems will tend to clear up for most young people shortly after the solvent use ceases. In terms of withdrawals, symptoms may include:

- Sleep disturbance
- Nausea and stomach cramps
- General irritability
- Facial tics

The other risks associated with solvent misuse relate to behavioural problems which arise from use or which can be exacerbated by use. As with alcohol, the disinhibiting qualities of volatile substances will impact on judgement and self-control and this may promote aggressive and violent behaviour. Regular use may also feature theft of either solvent based products or of money to purchase such products. A young person may start to encounter problems in school in terms of both attendance and a deterioration in performance, in some cases leading to early school leaving. All of these issues can contribute to family disruption as parents and siblings attempt to deal with an intoxicated child and the attendant problems detailed here. In terms of nitrates or poppers, use tends to be associated with older adolescents and adults and the combination of disinhibition and use in a sexual context has been shown to be linked with unsafe sexual practises and an increase risk in the spread and contraction of sexually transmitted infections.
Legal Status

The sanctions attached to solvents in the context of their misuse relates to their sale to under 18s.

- It is an offence for any person to sell, offer or make available any substance to persons under 18 years, which they know or have reasonable cause to believe, is likely to be inhaled for the purposes of causing intoxication. Someone found guilty of such an offence under Section 74 of the 1991 Child Care Act may be fined up to €1,270, imprisoned for twelve months or both.
- This section of the Act also permits a Garda to seize any substance in a child's possession in a public place where there is reasonable cause to believe that the substance is being abused by the under 18 year old.
- The 1994 Criminal Justice (Public Order Act) makes it an offence to be intoxicated in a public place to such an extent that someone is a danger to themselves or others; with intoxication referring to solvents, alcohol and other substances.

Harm Reduction Approaches

Given the very immediate risks of accidental death associated with solvent use arising from inhalation and the action of the volatile substances on the body (irrespective of the number of times someone has misused solvents), there is no clear risk minimisation strategy related to administration. Risk can be reduced by looking at the consequences and dangers of solitary use and in some circumstances 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.” However, from a preventative perspective, given the lifetime prevalence of solvents, “using information from the 1999 ESPAD survey, the agency notes (European Monitoring Centre for Drugs and Drug Addiction in their 2003 annual report on the state of the drugs problem in the EU and Norway) that Ireland’s 15-16 year olds reported the highest lifetime use of inhalants (22%) in the EU …” it is important that parents, guardians and teachers know the signs and symptoms of solvent use and that there is awareness around the issue of availability. The familiarity of many of the products misused can mean that adults, whether in the home, at school or in a retail setting may not be as proactive in securing and limiting access to them as they would with substances or products which present more obvious risks to the health and safety of young people. This may be an area that can be addressed in a school’s substance use policy through a section detailing:

- How products will be securely stored
- How limited access to products will be maintained
- How products which do not have a legitimate use within the school are not permissible
- Use of solvent free products where possible
The use of cannabis is well-established throughout the time of human civilisation, with archaeological evidence pointing to its cultivation in a Neolithic settlement in Taiwan.\(^6^6\) In contemporary terms, it is the most frequently used illicit drug in Ireland. In a recent study (NACD/DAIRU 2003) lifetime prevalence of cannabis use was 18\% (higher among young people with almost a quarter of those aged 15-34 reporting having ever used cannabis in their lifetime). The use of cannabis in the previous month (current use) was reported at 2.6\%.\(^6^7\) A recent report from the European Monitoring Centre for Drugs and Drug Addiction points out “… that at least one in every five adults in the EU has tried the drug.”\(^6^8\)

There is an ongoing debate regarding the legal status of cannabis, its safety relative to other drugs and its therapeutic benefits. However, as with all psychoactive substances, it has the potential for misuse and causing harm to those who use it: “… a cannabis dependence syndrome may occur in long-term regular users and, internationally, it has been suggested that one in ten of those who ever use cannabis will meet the criteria for cannabis dependence.”\(^6^9\)

**Physical Description**

The term “cannabinoid” is used to describe the family of naturally-occurring chemicals found in cannabis.\(^7^0\) Cannabis itself produces over 60 different cannabinoids\(^7^1\) and 400 different chemicals with the most important cannabinoid being tetrahydrocannabinol (THC) – the main psychoactive component of cannabis. Cannabis takes the form of one of the following:
Herbal cannabis (marijuana, grass, weed, ganja) consisting of the dried leaves and female flower heads. According to international studies, it contains between 0.5-5.0% of THC.

Cannabis resin (hashish) which is secreted by the leaves and flowers and compressed into blocks. THC content varies between 7% and 14%, although concentrations of up to 20% have been found.

Cannabis oil (hashish or hemp oil) is a concentrate of cannabinoids obtained by solvent extraction of the crude plant material or of the resin. The THC content has been reported to vary from 15-50% and is the most potent form of all the cannabis drugs.

Administration

There are two modes of administration; smoking or ingesting.

- Herbal cannabis or grass can be smoked in a pipe or in a joint – a hand made cigarette with or without the addition of tobacco depending on the preference of the user.
- Cannabis resin can be heated, small amounts broken off and again either smoked in a small pipe or bong (a water pipe) or mixed with tobacco to make a joint. Smokers typically inhale deeply and hold their breath to maximise absorption of THC by the lungs.
- Cannabis can be ingested either as a tea made from herbal cannabis or from the addition of herbal cannabis or resin to home-made biscuits or cakes.

Desired Effects

Cannabis is a sedative with hallucinogenic properties whose mood altering effects depend on the strength of the cannabis, the length of time it has been stored (potency is effected by time and exposure to light and air), the amount used, the way it is taken and the experience, mood and expectations of the user. Its desired effects can be separated into three areas:

- Elevated mood, a feeling of relaxation and mild euphoria
- Altered perception and thought processes, with time distortions, aroused appetite and with enhanced sensory appreciation. This is particularly apparent in relation to visual images/colours and music/sounds arising from the hallucinogenic effects of cannabis leading to the intensification of ordinary sensory experiences such as eating, watching films and listening to music. This goes some way to explaining why cannabis has a strong association with a number of music genres in popular culture; including jazz, the 1960's psychedelic movement and reggae. Whether or not cannabis is central to any branch of music appreciation or creativity is a moot point. However, it is worth considering that the pharmacological impact of any drug is mediated by the expectations of the user and the setting or environment within which it is used. For example, in the 1950s, when heroin use amongst jazz musicians was reaching crisis proportions, it was said that “jazz was born in a whiskey barrel, grew up on marijuana and is about to expire on heroin,” neatly capturing the changing primacy of position for different substances in jazz and in turn reflecting changing social conditions and habits. (The switch from alcohol to marijuana is linked to the American prohibition of alcohol from 1920 to 1933 – one of the factors which saw a rise in marijuana use in urban settings.)
- Increased sociability – cannabis is commonly used in social settings and is associated with users becoming more sociable, talkative and relaxed.
Duration of effects

Potency, mode of administration and the user (experience of use, physiology and psychology) obviously impact on the onset and duration of effects.

- Initial effects are felt between one to ten minutes if cannabis is smoked and up to an hour after being eaten.
- Effects peak within 15 to 60 minutes.
- Residual effects (coming down from the peak effects) can be experienced for another two hours.
- After effects may last for up to 24 hours.\(^7\)
- Cannabis is detectable in the system for up to 30 days after use.

Signs and symptoms of use

Signs and symptoms of cannabis use include:

- Bloodshot eyes
- Giggling, especially in early stages of use
- Increased appetite, also known as the “munchies”
- “Bomb” burns on clothes – small multiple burn marks caused by falling bits of burning cannabis resin or ash
- Paraphernalia associated with making cannabis joints including:
  - Torn off pieces of cardboard from cigarette boxes, filter paper packets or other cardboard items used to make a “roach” – a type of filter
  - Bits of loose cigarette tobacco around the home
  - Unstained loose cigarette filters – discarded when the tobacco from the manufactured cigarette is used to make a joint

Short-term risks

Unpleasant side-effects of occasional cannabis use include anxiety and panic reactions.\(^79\) It disrupts the control of blood pressure leading to an increased risk of fainting. Heart rate increases within 15-30 minutes of inhalation and remains raised for two hours or more. This cardiovascular effect of cannabis is similar to the effects of exercise and probably does not constitute a significant risk in healthy adolescents and young adults.\(^40\) From a cognitive perspective, cannabis interferes with short-term memory and learning abilities. Even simple arithmetic skills can be disrupted for 24 hours after use.\(^41\) The ability to drive or use machinery is also impaired by cannabis use, “… evidence of the negative impact of cannabis on driving ability is available from simulator studies and surveys of US teenagers, showing that they were three times more likely to have been involved in an accident if they were cannabis smokers compared to non-smokers.”\(^42\)

Long Terms Risks

In 2002, a survey entitled ‘Attitudes and Opinions of Young People in the European Union on Drugs’\(^83\) was conducted with 7,687 young people, aged 15 to 24 years old, being asked a range of
questions relating to substances and substance use. “The results of the enquiry confirms the special position of cannabis among drugs. Aside from tobacco and alcohol, cannabis is judged the least dangerous substance on the list.” 30% of Irish respondents reported regarding cannabis as a very dangerous substance, as opposed to 91% who placed heroin in that category. Perceptions of cannabis and the amount of risk arising from its use have fluctuated throughout history. In the 1930s an American anti-drugs leaflet described it as “… the killer Drug Marihuana – a powerful narcotic in which lurks Murder! Insanity! Death!” The more recent view, stemming from an increasing body of knowledge, points to significant risks associated with long term use and includes the risk of dependence.

As most cannabis is smoked, in addition to the risks associated with nicotine use, there is an increased risk of bronchitis and asthma. In fact, “because of differences in smoking techniques for joints and cigarettes, at least four times more tar and five times more carbon monoxide are inhaled by a cannabis smoker compared to a cigarette smoker”. Regular users often report physical and mental lethargy and heavy users may suffer from apathy and loss of ambition. Research suggests that the use of cannabis three or more times a week, results in a state of chronic intoxication. Because cannabis is fat-soluble, it persists in all parts of the body, including the brain, for up to four weeks after a single dose. This results in a general slowing of information processing, leading to sluggish mental performance.

Additional concerns regarding cannabis centre on what part it plays in terms of psychiatric consequences and whether cannabis is a “gateway” drug. In relation to the first concern: “Public health researchers in the Netherlands now believe that there is ‘converging evidence’ to show that cannabis is a risk factor for schizophrenia … [warning] that cannabis approximately doubles the risk of schizophrenia and that the risk increases in proportion to the amount of drug used.” The “gateway” theory is probably the most controversial aspect of cannabis use. It stems from the observation made in many retrospective studies that those who use heroin and cocaine have also generally used cannabis first. However, an ongoing debate is whether or not cannabis use initiates and is a precursor of problematic use across a range of other substances. “Cannabis, together with alcohol and tobacco, is often deemed to be one of the ‘gateway’ drugs … but most people who experiment with cannabis do not go on to use heroin or cocaine … international experience suggests that those teenagers who become heavy daily cannabis users at an early age are at higher risk of progressing to other drug use because of behavioural, family and school problems which were noticeable before they began to use cannabis.”

Legal Status

Cannabis is governed by the Misuse Of Drugs Act 1977 (schedule 1) and is therefore illegal to grow, produce, supply or possess. It is also an offence to allow a premises to be used for cultivating, supplying or smoking cannabis. Further clarification of definition is contained in the 1984 Act.
Ecstasy has both stimulant (amphetamine) and hallucinogenic properties, the active ingredient being methylenedioxymethamphetamine (MDMA).

Physical description

Ecstasy comes in tablet form with different logos and in different colours. The various designs and colours appearing on the tablets have no intrinsic significance as to the quality of the tablet and, in many respects, this feature of their production reflects the perceived value and importance of labels and branding. Obviously, as an illicit drug, there is no trade-marking, copyright or quality control involved in the production and distribution of ecstasy. Tablets bearing the same logo do not automatically share the same provenance. Whilst concerns about contaminated ecstasy have been raised, there is no scientific evidence that heroin or rat poison have been added to MDMA tablets. Deaths relating to ecstasy use are relatively rare.\(^5\)

\(^{\dagger}\) Designer drugs refers to analogues, i.e. substances developed and/or produced in illicit laboratories with recreational applications but which are currently outside of existing schedules of prohibited drugs and therefore legal.
Administration

Ecstasy is taken orally, the number of tablets consumed depending on the experience of the user and the perceived potency of the tablets. Obviously, the more tablets taken in one episode the higher the potential for risk; to address this, ecstasy users may initially take half a tablet to see how they respond to it.

Desired effects

The sought after effect is that of feeling content, relaxed and happy with a warm friendly feeling towards others. Users also feel energetic in that it allows them to dance for sustained periods. Users may have increased self-awareness and increased perception of visions and music; however, no true hallucinations occur at “normal dose” levels.96

Duration of effects

The effects usually start about 30 minutes after taking the drug and subside within 2-3 hours.

Signs and symptoms of use

The following are associated with ecstasy use:

- Hyperactivity and boundless energy
- Unusual confidence
- Very talkative
- Sweating
- Dry mouth/thirsty
- Dilated pupils
- Tremors and palpitations
- Jaw stiffness/teeth grinding

Short-term risks

One of the main fears about to ecstasy relates to heat stroke or hyperthermia which has been linked to deaths in the past. However, it is important to bear in mind that “… deaths resulting from MDMA are relatively rare … a study of toxicology reports from coroners’ inquests conducted in the greater Dublin area from 1998 to 2000 showed that ecstasy was involved in only one death.”97 Ecstasy causes the body temperature to rise from its normal level of 37° centigrade up to 41° centigrade in some individuals. This can be further aggravated by prolonged dancing and the heat inside a club. Death can subsequently occur due to muscle breakdown, clotting inside the body and kidney failure. It is not known why some individuals have such an extreme reaction and why others do not.98 The harm minimisation approach to address this issue has been to advise ecstasy users to sip a pint of water over an hour. In some cases, contrary to this advice, large volumes of fluid have been ingested.
quickly leading to water intoxication. “This has been linked to a direct effect of MDMA resulting in the increased production of a hormone called Vasopressin or ADH. The effect of Vasopressin is fluid overload after excess water consumption because the kidneys do not function, resulting in cerebral oedema (swelling of the brain), coma and death.”

Other deaths have arisen from delusional behaviour, heart attacks, strokes and asthma attacks. Other short term risks may include:

- Inexperienced users finding the initial ‘rush’ frightening which can lead to panic
- A rise in blood pressure, pulse and temperature
- Convulsions, stroke and severe chest pains
- Emotional openness and enhanced sexual desire may lead to unsafe sexual practices, however, male sexual performance is impaired as a side-effect of ecstasy use.
- When the effects subside, users may feel tired, drowsy, lacking in energy, irritable and be unable to sleep for periods lasting from 24 hours to a week.
- With the above in mind, people with a history of high blood pressure, heart disease or asthma would be best advised not to use ecstasy.

### Long-term risks

Psychiatrists report that regular ecstasy use is associated with chronic psychiatric symptoms, including:

- Psychotic episodes
- Panic disorder
- Depersonalisation (a feeling of floating outside of one’s body)

which may continue after drug use has stopped. However, it is still unclear whether such experiences reflect pre-existing conditions, triggered by ecstasy or if the use of the substance is the cause of the problems.

Other risks associated with prolonged use include:

- Weight loss due to appetite suppression/frequent dancing
- Mood swings and depression
- Memory loss

Given the relatively short period of time ecstasy has featured in recreational drug use, it is difficult to state with certainty all of the risks associated with its use. It is not considered a drug of addiction but given its stimulant/amphetamine qualities it does have the “… potential to cause psychological dependence.” The other area of risk relates to memory and learning and while “… significant impairment of verbal and spatial memory, word recall, arithmetic skills, verbal recognition and information processing speed …” has been found in users, results have been confounded by the fact that the vast majority of ecstasy users are polydrug users, i.e. are using ecstasy in conjunction with one or drug such as alcohol, cannabis or amphetamines.

Behaviours that increase harm include:

- Using new or unusual tablets
- Taking too many tablets, too often
- Using alone – difficulties may arise and assistance may be required.
- Using other drugs to counteract the “comedown”
- Using other drugs to bring on a “comedown”
- Excessive intake of alcohol (dehydrating) and/or water in order to cool down
- Not taking regular breaks and rests from dancing

**Legal Status**

Ecstasy is governed by the Misuse of Drugs Act (schedule 1). It cannot be prescribed, sold or distributed and is illegal to possess.\textsuperscript{104}
Cocaine

Cocaine is a powerful stimulant drug, extracted from the leaves of the coca plant. Its use has been predominantly associated with affluence but in recent times an increase in availability coupled with a decrease in price has seen cocaine start to make inroads into new European markets not defined by wealth and high-living. In Ireland it has been suggested that cocaine use is more prevalent in those individuals who report problem drug-taking and whose poly-drug use has extended from opiates to include cocaine. However, social/recreational cocaine use has also been noted, with a life-time prevalence for cocaine (including crack cocaine) of 3% reported in the NACD/DAIRU 2003 report. (This is on a par with LSD, amphetamines and poppers.) Reported use in the previous month for all adults in the survey was 0.3%, with figures of 0.7% for 15-34 year olds and 0.9% for 15-24 year olds.

**Physical description**

Cocaine or ‘coke’, is a fine, white crystalline powder which is usually “cut” or adulterated with other substances such as lactose (milk sugar), mannitol or local anaesthetics such as procaine or lignocaine to increase volume and consequently profitability. In recent years the purity of the cocaine sold in Ireland is believed to have fallen from 62% to around 38%.
Administration

Cocaine is taken:

- Intra-nasally (through the nose)
- Intravenously (through a vein)
- Smoked

Cocaine is usually snorted or sniffed; laid out in lines and sniffed through a rolled-up piece of paper, often a bank note, or a straw. By snorting, cocaine is conveyed directly into the bloodstream via the mucous membranes of the nose and throat where it dissolves.\(^{109}\)

It can be injected and combined with other substances such as heroin to make “speedballs”, combining the stimulant and sedative effects of the two different drugs, or smoked in the form of “crack” also known as free-base or rocks. Cocaine is made into crack by dissolving the powder in water and heating it, normally with the addition of baking soda. The term “crack” is used because of the noise made when the “rock” is heated. Crack is smoked in either manufactured glass pipes or improvised ones. Apart from being smoked in a pipe, the base form of cocaine (referred to as freebase, which has been washed with ether or ammonia to make the coke smokeable) can be ‘chased’\(^{†}\) on silver foil, similar to the way heroin is smoked or sprinkled into joints/hand-made cigarettes to make a more efficient form of ‘charlie spliff’.\(^{110}\) Outside of speedballs, research in Dublin has noted the combination of alcohol with cocaine. This combination converts into cocaethylene in the body which lasts longer in the brain and is more toxic than either drug alone.\(^{111}\) Obviously, this combination brings with it the risks associated with both drugs and may indeed produce a multiplier effect.

Desired Effects

The desired effects of cocaine use include:

- Feelings of euphoria, increased self-worth and emotional disinhibition
- Increased energy
- Increased mental activity and alertness
- Lack of appetite
- A heightened sense of pleasure\(^{112}\)

Smoking crack produces similar effects. However, the mode of administration ensures a more intense high but one which is shorter in duration than intranasal use.\(^{113}\) This particular aspect of the pharmacology of crack lends itself to binge use, as users rapidly smoke hit after hit to keep experiencing the intense effects. This practise considerably increases the risks of developing habitual patterns of use.

\(^{†}\) ‘Chase’ – placing of substance on foil which is then heated from a flame below. The fumes are then inhaled through a makeshift tube.
**Duration of effects**

Mode of administration dictates the duration of effects:

- Snorting, the effect peaks at around 5 to 20 minutes.
- Smoking ‘crack’ has an effect within seconds. One dose may last for up to 10 to 12 minutes.
- Intravenous use takes effect in seconds. A dose lasts less than 10 to 12 minutes.

**Signs and Symptoms of Use**

The following are associated with cocaine use:

- Unusual confidence
- Hyperactivity and insomnia
- Being very talkative
- Nose irritation – it may be runny or itchy due to “snorting”.
- Dilated pupils
- Loss of appetite
- As with heroin, if cocaine is being injected there maybe track marks on the body and evidence of injecting equipment.
- Paraphernalia associated with ‘crack’ use includes improvised pipes made from tin cans, water bottles or tin foil as well as glass pipes.

**Risks**

Cocaine use can vary from sporadic recreational use to binge use over a period of days which may result in bizarre, aggressive and violent behaviour. There are particular risks associated with using high doses or repeatedly using smaller doses in an attempt to maintain the desired mood-altering effects. These include:

- Insomnia
- Agitation, anxiety and panic attacks
- Hallucinations
- Blood vessel constriction

Excessive doses can cause death through heart failure or lung damage. After discontinuing regular use of any form of cocaine, the user will experience a ‘crash’ – severe depression and tiredness, along with excessive eating and sleeping. The experience of the ‘crash’ brings about its own risks with some cocaine users becoming so depressed that they may attempt suicide. Some will attempt to counteract the ‘crash’ through a self-medication approach using tranquillisers, alcohol, or injecting heroin and cocaine “speedballs”.

---

**Drug Facts**
With chronic frequent use, increasingly unpleasant effects include:

- Damage to the lining of the nose
- Restlessness
- Insomnia
- Weight loss
- Paranoid psychosis with delusions of persecution
- Violent tendencies
- “Snow lights” (visual disturbances)
- “Cocaine bugs” (a feeling of insects crawling under the skin)

These effects generally clear up once use is discontinued.\textsuperscript{115}

Cocaine is not physically addictive but produces a severe psychological dependence because of the strong cravings which lead to compulsive continuous use. However, it is difficult to predict who will maintain control of their cocaine use and who will become chronic dependent users.\textsuperscript{116}

**Legal Status**

Cocaine is governed by the Misuse of Drugs Acts 1977 and 1984. Whilst it can be prescribed and dispensed, it is illegal to produce, possess or supply (except on prescription). It is also illegal to allow one’s premises to be used for producing or supplying cocaine.\textsuperscript{117}
Amphetamines

Amphetamine is a synthetic stimulant, which, since its production in 1887, has featured in a range of applications (medical and non-medical) including use by soldiers during the Second World War and the Vietnam War to promote performance and endurance; as a slimming tablet; to treat mild depression; in youth culture as a feature of parties in the 1960s\textsuperscript{118} and more recently, as one of the drugs associated with ecstasy and other dance drugs.\textsuperscript{119}

Physical Description

Amphetamine is sold in paper wraps, containing a pink or greyish powder.

Administration

Amphetamine can be taken:

- By mouth
- By sniffing/snorting
- By smoking
- By dissolving in water and injecting
**Desired Effects**

The intensity of effects depend on the mode of administration. A small dose of around 30mgs taken orally will have a similar effect to the natural release of adrenaline, preparing the body for ‘fight or flight’ in response to stress or an emergency. The effects are as follows:

- The nervous system is stimulated.
- Breathing and heart rate increase.
- Blood pressure increases.
- Pupils dilate (widen).
- Appetite is suppressed.
- User feels more active, alert and energetic.
- Feelings of fatigue lessen.
- Mental activity increases with better concentration and clearer thinking.

These changes contribute to a general feeling of well-being. For higher doses taken through smoking, sniffing or injecting, the experience is of a more intense rush of pleasure; the psychoactive effects happening with greater intensity than amphetamine taken orally. This may see some users binge over several days. Higher doses see:

- Users become overactive, boastful and they may indulge in repetitive behaviour.
- Users may also experience hallucinations and feelings of persecution and/or panic.

**Duration of Effects**

The duration of effects will depend on the purity of the drug, the mode of administration and the tolerance of the user.

**Signs and Symptoms of Use**

Signs and symptoms are similar to cocaine as both drugs are stimulants, including:

- Unusual confidence
- Hyperactivity and insomnia
- Being very talkative
- Nose irritation – it may be runny or itchy due to “snorting”.
- Dilated pupils
- Loss of appetite

As with heroin, if amphetamine is being injected there maybe track-marks on the body and evidence of injecting equipment.

**Short Term Risks**

Repeated use of small doses may see some users experience:
Irritability
- Confusion
- Dizziness

Given the way that amphetamines stimulate the body in a similar fashion to adrenaline, its use, particularly when bingeing or after more sustained use, may contribute to feelings of deep depression, exhaustion, sleepiness and extreme hunger as the body addresses postponed fatigue and the depletion of energy. Those who use high doses of amphetamines on a regular basis are likely to develop ‘amphetamine psychosis’. This drug-induced condition is similar to schizophrenia and includes:
- Thought disorders
- Hallucinations
- Feelings of being persecuted, which in turn may lead to hostility, aggression and violence towards others, as the user defends themselves against their imagined persecutors. This condition will usually disappear when drug use ceases but for some people will persist for a considerable period of time.

Long Terms Risks

Users can develop tolerance to many of the effects of amphetamines, which may see the quantities consumed rise from a normative stimulant dose of 10mgs to 15gms a day. Given the intensity of the mood-altering effects experienced, particularly in relation to the rush associated with higher doses and more efficient administration, “… severe psychological dependence can develop …”.

Legal Status

Most amphetamines are controlled under the Misuse of Drugs Acts, with their unauthorised production, supply or possession and allowing premises to be used for their supply or production being an offence. Various amphetamines are also controlled by the 1970 Medical Preparations (Control of Amphetamines) Regulations which equally prohibits their manufacture, preparation, importation, sale and distribution. Where amphetamines are needed for treatment of a patient, the Minister of Health & Children can grant a licence to allow their supply; however, they are not available for normal prescription by doctors or pharmacies.
LSD, lysergic acid diethylamide, also known as “acid” is a hallucinogenic drug, which can generate profound distortions in the user’s perceptions of reality. LSD was synthesised in 1938 by the chemist Albert Hofmann who was working on developing possible medical applications for compounds derived from ergot, a natural occurring fungus found on rye grass. However, the use of naturally occurring hallucinogenics such as mescaline found in the Peyote cactus and psilocybin found in magic mushrooms (referred to as teonanacatl ‘flesh of the gods’ by the Aztecs\(^\text{124}\)) have a considerable history. In a wide range of cultural and geographic settings, there is evidence of hallucinogenics being utilised as an aspect of religious ritual to promote detachment from reality and to induce ‘mystical’ visions; this particular deployment of psychoactive substances was renewed in the late 1950s and throughout the 1960s whereby users sought to expand their minds and raise their consciousness through the use of hallucinogenics as part of hippie counter-culture.

**Physical description**

LSD is a clear or white, odourless, water-soluble material which is initially produced in crystalline form.\(^\text{125}\) The crystals can be crushed and mixed with binding agents to produce microdots – small powders absorbed onto blotting paper, tiny stars of paper, cartoon characters or ink-blots on blotting paper. It is usually swallowed or “dropped”. A tiny amount (30 micrograms) is needed to produce hallucinations which may last for up to 12 hours.\(^\text{126}\)
Administration

LSD is taken orally, with the tab or microdot allowed to dissolve on the tongue. It may also be administered by being placed on the eyeball – a practice more commonly associated with LSD in liquid form.

Desired Effects

The desired effects of LSD are a ‘good’ trip; that is a positive hallucinogenic experience which may involve:

- Colours taking on brighter, more vivid appearance
- Body images and shapes may appear distorted
- Sight and sound may become confused in that the individual may “listen” to colour and “see” music due to sensory crossover.
- A sense of time and place may become distorted
- Emotional/mood changes including heightened self-awareness and mystical experiences

It should be noted that good and bad trips are not mutually exclusive experiences and an episode of acid use may encompass both.

Duration of Effects

An LSD trip begins about an hour after swallowing the drug. It peaks 2 to 3 hours later and the effects usually wear off after 12 to 15 hours. An increase in pulse, blood pressure and temperature, in addition to widening of the pupils can be experienced by the user. However, effects are difficult to predict as they depend upon the experience and expectations of the individual, the potency of the tab ingested and there environment within which the drug is taken.

Short-Term Risks

The unpredictability of how an individual will respond to each episode of LSD use is an ever-present risk for users, whether novice or experienced, but it is believed that there is a higher ratio of bad to good trips.

A bad trip may include:

- Frightening mood changes and severe terrifying thoughts
- Anxiety and feelings of loss control
- Depersonalisation (a feeling of floating outside one's own body)
- Disorientation and panic
- Fear of going mad or dying
For the distressed user, reassurance plays a significant role in addressing serious panic, anxiety or even psychotic reactions. LSD use will also impair cognitive skills such as learning, memory and concentration. Unpleasant reactions are likely if the user is mentally unstable, anxious or depressed. Prolonged mental illness such as schizophrenia or depression may be triggered by an LSD trip.\textsuperscript{128}

Positive experiences of acid use also carry risks due to their impact on perception. Users are at risk of being injured due to delusions, particularly in relation to the perceived ability to fly or walk on water. There are no exact figures for fatalities arising from accidents or suicide in relation to acid but death due to over-doses is non-existent.\textsuperscript{129}

Risks associated with LSD use increase when:

- the user panics on LSD (or any other drug) and there is no one to reassure them, maintain their safety or get medical help if needed.
- there is a history of mental illness or depression in the user.

**Long-Term Risks**

A trip can be re-experienced without taking LSD again and can occur weeks or months after the initial episode of use. This flashback or hallucinogen persisting perception disorder is a "… spontaneous, repeated, sometimes continuous recurrence of some of the sensory distortions originally produced by LSD."\textsuperscript{130} This can cause disorientation, anxiety and distress, particularly as it can be difficult to diagnose, given the similarity of symptoms with other neurological disorders. Flashbacks can be particularly dangerous if experienced when one is driving, working at heights or operating machinery. No physical dependence or compulsive drug-seeking behaviour occurs with LSD use. Tolerance will develop with more sustained use which may, in some instances, act to reduce habitual use.\textsuperscript{131}

**Legal Status**

The Misuse of Drugs Acts schedules LSD as having no application in medicine (schedule 1); so therefore possession, production, supply and allowing premises to be used for their supply or production is prohibited.
The recent NACD/DAIRU 2003 prevalence survey recorded that of the Irish adults (aged 15-64) surveyed, 4% reported the use of magic mushrooms in their lifetime, 0.3% reported use in the last year and 0.1% reported use in the last month. This low prevalence is matched by low seizures by the Gardaí of magic mushrooms, equally few prosecutions and a reduction in patients attending drug treatment centres reporting use of this drug.

Physical Description

Throughout the world there is a range of fungi with psychoactive properties. In an Irish context, it is thought that the Liberty Cap mushroom (*Psilocybe semilanceata*) which grows wild, is the one most commonly used. This mushroom is small, with a thin stem and a head which is said to resemble head gear worn during the French Revolution, hence its name. However, this description in no way can serve as a field guide to differentiating this mushroom from other varieties which may be poisonous. This “... is a complicated task, requiring reference to relevant botanical texts and some expertise in the classification of mushrooms and is not a task to be performed while hallucinating.”

Administration

The mushrooms can be eaten raw, cooked or brewed up to make a tea. They may also be dried so as to preserve them for future use. The number of mushrooms taken in any one episode of use will vary depending on the experience and expectations of the user; with anything from 8 to 300 mushrooms being reported.
Desired Effects

The desired effects of magic mushrooms are similar to a mild LSD trip, including:

- Euphoria and hilarity
- Dilated pupils, increased pulse rate and high blood pressure

Hallucinations tend to be visual but some users will experience auditory ones. There are reports of users having the heightened awareness of sound and colour and the sensation of objects changing shape.\textsuperscript{137}

Duration of Effects

The mushrooms will start to take effect after approximately 30 minutes and will wear off after about four hours.

Signs and Symptoms of Use

As for desired effects above

Short Term Risks

Again, there is similarity between LSD and magic mushrooms in terms of risks. Users have reported:

- Nausea, vomiting and abdominal pain

This may occur because of ingesting poisonous mushrooms. Users have also referred to the experience of bad trips which may include:

- Feelings of depersonalisation
- Panic and anxiety
- Psychotic reactions
- Aggression and hyperactivity
- Tingling limbs and flushing

The duration of a bad trip is normally around 12 hours, with no long-term effects and the negative experiences listed above can be dealt with through friendly reassurance. There are also reports of users engaging in rash behaviour such as running in and out of traffic or along railway lines, which obviously increases the likelihood of fatal or non-fatal accidents. Recurrence of panic/anxiety attacks often triggered by alcohol use are experienced by some users.

Long Terms Risks

There is little evidence as to the long-term effects of frequent use of magic mushrooms, however, tolerance develops rapidly. There are no major withdrawal symptoms when use ceases and whilst a user may develop a psychological dependence, physical dependence is not a feature.
Legal Status

The Misuse of Drugs Acts schedules psilocybin and psilocin (another naturally occurring hallucinogenic found in different species of mushrooms) as having no application in medicine (schedule 1) so their possession, production, supply and allowing a premises to be used for their supply or production is prohibited.
Heroin

The drug heroin is a member of the opiate family, a group of substances ultimately derived from opium, which is a “… dried milky latex extracted from the fruit of the opium poppy.”  Opiate use figures within a diverse range of human cultures and has a long history, “… it can be traced back to neolithic settlements on the shorelines of the Swiss lakes, the eastern Mediterranean and the Black Sea coast.”  Drugs from the opiate family are used across the spectrum of substance use in Ireland today. Opiates are strong, sleep inducing painkillers and are found in over the counter painkillers containing codeine, cough medicines, anti-diarrhoea preparations, dihydrococaine and buprenorphine (used to treat moderate to severe pain), and methadone (prescribed as a substitute for dependent heroin users in either maintenance or detoxification programmes).

In Ireland, heroin use dates from the late 1970s. It has been recognised as one of the country’s most pressing drug problems, given the impact not just on the individual user but also on their family and community (and typically Dublin communities “… characterised by poverty and generalised deprivation …” ). Intravenous drug use also has wider public health implications, in particular the transmission of HIV, Hepatitis B and Hepatitis C.

Physical Description

Heroin, at the time of production, is a white, odourless powder which over time darkens to varying shades of brown and develops a vinegar like smell. Heroin is usually sold as “wraps” i.e. wrapped tightly in small pieces of plastic.
Administration

Heroin can be:

- administered intranasally, that is, sniffed
- swallowed or dissolved in water and drunk
- smoked, sometimes referred to as ‘chasing the dragon’
- injected intravenously (into a vein)
- injected intramuscularly (into a muscle, the usual way in which medical injections are administered to avoid damage to the veins)
- injected under the surface of the skin, referred to as ‘skin popping’

Injecting, followed by smoking, are the preferred options amongst most users. As with other substances, injecting into a vein maximises the effects of the drug. Infection from blood-borne viruses such as hepatitis B, hepatitis C and HIV are a possible risk of injecting practices which may involve the sharing of needles and injecting equipment. Physical damage from long-term use of opiates is usually associated with unhygienic injecting practice, rather than damage to organs in the body. Corrigan states “there are no serious diseases attributable to chronic narcotic use that would parallel the damage to the liver and lungs caused by alcohol and tobacco”.

Desired Effects

The desired effect associated with this particular opiate and the predominant mode of administration – injecting – is the ‘heroin rush’. This lasts less than a minute and includes a:

- Warm flushing of the skin
- Sexual excitement, followed by:
  - A dream-like state of peacefulness and contentment
  - Reduced feelings of pain
  - Reduced aggressive tendencies and sexual drive

However, the sought after euphoric effects of heroin are most closely associated with the early stages of use. For those whose use becomes progressively more frequent and habitual, little euphoria is experienced. Equally, many first time users of heroin experience feelings of nausea and vomiting.

Duration of Effects

When injected the effects of heroin are almost immediate with the rush lasting less than a minute. In theory, the duration of the effects of heroin is between six to eight hours, however, given the level of impurities in heroin the reality is that the effects last for a considerably shorter time.

You can test positive for opiates three to eight days approximately after last use. Withdrawal or “cold turkey” (referring to chills and goose-bumps) is experienced four to twelve hours after the drug was last used and may include flu-like symptoms, runny nose, sneezing, headache, sweating, anxiety and irritability. The severity of withdrawal will depend on a number of factors including the extent of drug use.
use and the user’s mental state. Whilst it is relatively ‘easy’ to detox someone who is opiate
dependent, heroin dependence is associated with high rates of relapse. Over a twenty year period, it
is estimated that approximately one third of those who enter treatment and are followed up achieve
abstinence. Another third will die and the remaining third will continue daily heroin use into their 40s
and 50s, where heroin use will continue 40 to 60% of the time, punctuated by spells in prison or in
treatment programmes.

**Signs and Symptoms of Use**

- Pupils become constricted, sometimes referred to as pin-point or pin-prick pupils
- The user is drowsy in appearance, referred to as ‘goofing’ or ‘goofing off’; drops in
and out of consciousness, slurs speech, has shallow breathing and has problems
maintaining focus
- Visible ‘track-marks’ on arms from injecting (sometimes on legs/neck) with bruising
and discolouration
- Acute and chronic opioid use is associated with a lack of secretions, i.e. dry mouth
and nose, and a slowing down of gastrointestinal activity resulting in constipation.

**Risks**

Behaviours that increase the level of risks associated with heroin use include:

- An individual using heroin alone
- Mixing heroin with other depressant drugs, including alcohol, sedatives and anti-
depressants
- Sharing needles and “works” (injecting equipment), which increases the risks of
contracting blood-borne viruses such as Hepatitis B, Hepatitis C and HIV. Other
potential problems associated with intravenous use include abscesses, lung clots and
the possible loss of a limb. Individuals may also be at risk of malnourishment and
neglect depending on how dependent their drug use is.
- Injecting in veins at high-risk sites such as the neck (close to the jugular vein) and
groin (close to the femoral vein)
- Personal safety may be an issue depending on how much opiate/heroin has been
taken.

The user may want to re-experience the “rush” and begin to use increasing amounts of the
particular opiate over time. Higher doses induce sleep and possible coma, particularly if combined
with other sedative drugs and/or alcohol. Tolerance develops rapidly with opiates but disappears
quickly when use is stopped. There is a risk of overdose when an individual loses tolerance after
having ‘detoxed’ in hospital or prison. This means the individual can no longer tolerate the same
dose as they were previously able to.

The length of time taken for dependence to develop is affected by the physical and mental make-up
of the individual and the quality and frequency of the drug consumed. Dependence can occur after a
few days but more serious dependence can take weeks or months to develop. However, a tendency
for dependence to remit gradually, referred to as ‘maturing out’ and generally after the age of 40 has
been noted.
Outside of the immediate health risks of addiction, infection, overdose, serious illness and premature death, the other factors associated with problem heroin use are considerable. They include involvement in crime, possibility of imprisonment and break down in family and community relationships. Collectively, these factors have a substantially detrimental impact on those communities most immediately affected.\textsuperscript{151}

**Legal Status**

Opiates are controlled by the Misuse Of Drugs Act 1984 (schedule 2). They are illegal to possess (unless prescribed by a doctor and dispensed by a pharmacist) or supply.

It is also an offence to:

- smoke opium
- to possess utensils for smoking or preparing opium
- to allow a premises to be used for preparing or smoking opium
- to cultivate the opium poppy

Certain non-injectable mixtures of codeine with other drugs, as well as very dilute opiate mixtures for cough or diarrhoea, are exempt from most of the restrictions of the Misuse Of Drugs Act but can only be purchased from a pharmacist.\textsuperscript{152}
The drug-related information in this publication has focused on a range of substances which have varying associations with recreational use, misuse and dependence. However, it would be an oversight to exclude over-the-counter (OTCs) and prescription drugs which, regardless of their origin, have the potential for misuse. For example, “insulin omission by diabetic teenage girls in order to lose weight has been reported as another type of medicine misuse. Eleven per cent of teenage girls in one study reported that they were currently taking less than their prescribed dose of insulin in order to lose weight. Among girls with diabetes and an eating disorder, 42% reported insulin misuse.”

Salbutamol inhalers, used to relieve a flair-up of asthma, are “… currently in vogue with cannabis smokers …” to address the impaired breathing associated with chronic use of cannabis by restoring airway function.

From a school’s perspective and indeed for parents, there are two key areas where greater awareness is needed:

- The risks of accidental poisoning for children
- The issue of administration of medicines within the school setting

**Poisons and Children**

“Most cases of poisoning occur in children under the age of five and most occur in a child’s home or the home of a grandparent, relative, childminder or at school. The peak time for poisoning in children is during late afternoon, weekends and during school holidays.”
In terms of medicines and other substances which could cause poisoning (these include household and gardening products, cosmetics, agricultural and industrial chemicals, plants and animals) there are a number of practical steps which can be taken to prevent poisoning:136

<table>
<thead>
<tr>
<th>Do …</th>
<th>Don’t …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do use containers with child-resistant caps but remember that these caps are child-resistant and not child proof.</td>
<td>Don’t leave drugs, household or cosmetic products, chemicals or pesticides within reach or sight of children.</td>
</tr>
<tr>
<td>Do keep chemicals and medicines out of the reach and sight of children.</td>
<td>Don’t leave containers open when using them.</td>
</tr>
<tr>
<td>Do keep all products in their original containers.</td>
<td>Never transfer medicines or other products into another container. Children will associate soft-drinks bottles and food containers with food and drink.</td>
</tr>
<tr>
<td>Do secure cupboards with child-proof locks.</td>
<td>Don’t remove the labels from medicines or household products. The labels have information with ingredients or symbols that are useful in case of emergency.</td>
</tr>
<tr>
<td>Do read all labels carefully to avoid accidental mistakes and contact your GP or pharmacy if in doubt about administering a medicine.</td>
<td>Don’t refer to medicine or tablets as sweets.</td>
</tr>
<tr>
<td>Do learn to recognise chemical symbols:</td>
<td>Don’t take your medicine in front of children as they often imitate the actions of adults.</td>
</tr>
<tr>
<td><img src="image1" alt="Toxic" /> <img src="image2" alt="Irritant" /> <img src="image3" alt="Corrosive" /> <img src="image4" alt="Flammable" /> <img src="image5" alt="Explosive" /></td>
<td></td>
</tr>
<tr>
<td>Do consult your garden centre when deciding on suitable plants for a garden.</td>
<td>Don’t keep out of date or unwanted medicines. Dispose of them in a safe and responsible manner. †</td>
</tr>
</tbody>
</table>

The preceding table illustrates both the important preventative steps which can be taken around poisons and the importance of modelling responsible behaviour around medicines and other substances. Home and school are two significant settings where young people learn the efficacy of drugs and the contexts in which they are used.

**Steps to follow in an emergency**

If a child is found with a poison or medicine which they have taken:

1. Stay calm but act quickly.
2. Take the poison away from the child.
3. Make the child spit it out, run your fingers around the mouth and flick any remaining pieces out.
4. If a chemical is splashed in the eyes, immediately wash the eyes with tap water.
5. Contact a GP or hospital emergency department.
6. Don’t make the child vomit.
7. When taking the child to their GP or hospital, always take the product container as well.

† In the South Western Area Health Board’s catchment area pharmacies participate in the DUMP project (Dispose of Unused Medicines Properly) and will dispose of unwanted medicinal products free of charge.
The Use of OTCs and Prescription Medicines in School

The use of OTCs and prescription medicines should be covered by a school’s substance use policy with regards to their use, storage and administration. (The INTO offers guidelines on this issue on its website.) Where there is a legitimate use of medicine the following are recommended:

1. The parent or guardian must first inform the school in writing as to the situation and detail any specific requests being made of staff, for example, the administration of medicines or supervision of use.

2. Requests of this nature should not be problematic if:
   - The school can accommodate the request and teachers are willing to take on a supervisory or administering role or accommodate a parent in so doing.
   - Teachers have permission from their Board of Management to take on this role.
   - Teachers have written permission from the parents/guardians in question and have received any necessary training/instruction.

3. The policy should also make reference to the safe and secure storage of medicines, identifying who has access to them and in what circumstances.

The aim here is to develop a consistent approach to appropriate medicinal drug use in schools with an emphasis on everyone involved – student, parent and school staff – exercising responsibility.
Parents concerned about their children's actual or potential drug use are often anxious to know what signs and symptoms they should look out for. A recent development in this area is the availability of home drug testing kits which, through either a urine sample or saliva swab, allow you to identify what drugs (normally cocaine, amphetamines, ecstasy, cannabis, opiates such as heroin and benzodiazepines) have been used. Drug testing is a procedure which is normally performed within the context of an explicit medical relationship and there are concerns that availability outside of a clinical setting is potentially problematic. If a school, or a parent is considering the use of such a product, there are a number of ethical, legal and practical issues to consider:

1. How will the test impact on the relationship between the young person and their parents or the school in terms of trust? Whilst the test will give an objective result, the use of such a procedure may undermine the relationship between the young person and those testing; and it is this relationship which will be crucial if the young person does need help.

2. How will a urine sample (the most common way of testing) be obtained? Any degree of coercion has quite serious legal implications for either the parents or the school in terms of the young person’s rights.

3. Are the test results reliable? There are a number of factors to consider here:
   - The norm is that tests like these are carried out by medical personnel trained in appropriately obtaining the sample, carrying out the test and interpreting the results – can you guarantee the same with a home drug testing kit?
There is the possibility of obtaining a false positive – there are a number of other substances, which may have been used appropriately which will also give positive results. These include:

- i Certain medicines, including over the counter preparations (OTC) which contain codeine or other opiate derivatives (painkillers, some cough medicines, anti-diarrhoeal products) will give opiate positive results – the tests do not distinguish between heroin and other opiates
- ii Foods such as poppy seeds, if taken in sufficient quantities, will also give an opiate positive result
- iii OTCs containing pseudoephedrine used in cold and flu preparations in a non-therapeutic (i.e. very high doses) context give an amphetamine positive result

The validity of the test is limited by the time which has elapsed between a drug being used and the test being carried out. The following gives approximate times for how long it takes the body to clear the drug after which urine analysis will be negative.

- Cocaine: 2 to 4 days
- Amphetamine: 3 days
- Ecstasy: 3 to 4 days
- Cannabis: 3 to 8 days, potentially up to a month with heavy users
- Opiates such as heroin: 3 to 8 days
- Benzodiazepines: 2 to 28 days

The test says nothing about the amount of the drug used, the type of use (experimental, recreational, habitual) or the circumstances of use.

The tests themselves are not 100% accurate and while they tend to only have a small margin of error, they are not infallible.

Given the factors detailed above and the nature of drug use in adolescence, the use of drug testing in the context of the home and school has the potential to achieve very little and may possibly cause problems to escalate, perversely increasing the level of risk to the child if trust between him/her and their parents and teachers is broken down.

In terms of observed signs and symptoms (outside of either habitual or dependent use where an individual is pre-occupied with drugs to the exclusion of other activities over a significant period of time; or observing acute intoxication as a result of bingeing – which is more likely with adolescents) it is very difficult to identify consistently present and observable signs which would indicate that a young person is involved in irregular experimentation. In fact, it is often only when drug use becomes problematic that these signs may be manifest.

The other caveat with the following list of signs and symptoms is that most are not exclusively linked to drug use and are normative aspects of the experience of adolescence. They should in no way be seen as an alternative to maintaining a positive, active relationship with a young person whether as a teacher or parent, based on mutual dialogue and respect for each other’s needs and responsibilities.

- Erratic mood swings
- Lying and secretive behaviour
- Changes in appearance. In serious cases, the person may begin to look unwell, alternated with periods of more energetic behaviour.
Changes in eating habits. Regular use of some drugs can lead to a loss of appetite.
Gradual loss of interest in school, hobbies and friends.
Changes in friendship patterns. If a young child is misusing drugs, s/he will tend to mix with older children and drop former friends.
Involvement in stealing and ‘bartering’ personal and family possessions for money.
Possessing unusual items and apparatus. Apart from tablets, powders, aerosols, etc. some forms of drug taking require equipment, e.g. pieces of foil, syringes, straws, plastic bags, cigarette papers, ‘wraps’ (square folds of paper), etc.
Unusual smells around the child, or on his/her clothing, e.g. smells of solvents and glues, the characteristic smell of cannabis.
Ireland's National Drugs Strategy (NDS) 2001-2008 is built around the four pillars of supply reduction, prevention, treatment and research – a comprehensive and integrated approach to addressing a range of drug issues. Specific to schools, it states the need to “…maximise the effectiveness of school-based programmes through efforts to keep young people engaged in school and the identification and provision of supports for at-risk children, management of drug-related incidents and a broad-based curriculum which supports all aspects of the child’s development”. Drug education can promote a working partnership between schools, parents and the community, facilitating a coherent and measured response which is specific to the individual school.

Action 43 of the NDS states that the Department of Education & Science and the Department of Health & Children are

“To develop guidelines, in co-operation with the Health Boards, to assist schools in the formation of drugs policy and ensure that all schools have policies in place by September 2002.” In terms of supporting schools, each school has received a copy of the ‘Guidelines for developing a School Substance Use Policy’, The document provides a 7-step process for policy development as outlined below.

Drug education will certainly challenge the teacher’s own values and attitudes. Teachers have expressed feelings of being ill-equipped in this area. However, “effective teaching about drugs has the same characteristics as good teaching in
any subject”. In addition, it is important to “identify existing pupil knowledge as a starting point”. Similarly, drug education within the school setting needs to be part of an integrated curriculum rather than “separating out drugs and alcohol from the rest of their education”. Staff training needs, including regular updates to reinforce and review knowledge and skills, should be provided for.

Extract from ‘Guidelines for developing a School Substance use Policy – Department of Education and Science, Health Promotion Unit and the Regional Health Boards 2002’:

Introduction
The National Drugs Strategy 2001-2008 sets out a detailed programme of action to be implemented by Government Departments and Agencies to combat the very serious problem of drug misuse in our society. The strategy highlights the important contribution that schools can make in the area of education and prevention and requires them to have substance use policies in place.

The central objective of a school’s substance use policy is the welfare, care and protection of every young person in line with the Education Act, 1998 and the Education (Welfare) Act, 2000. The policy should address both education concerning alcohol, tobacco and drugs and the procedures for managing incidents relating to these substances.

The issues involved in the design of a school substance use policy are complex. The policy should represent an integrated community-based response. It should be developed through existing consultative structures within the school and should build on existing school policy, e.g. discipline, bullying, RSE. While the school substance use policy should cover alcohol, tobacco and drugs, different issues may need to be addressed under each of these three headings.

Why a policy on substance use?
• The world in which we live presents young people with many challenges which affect their health and well-being. Exposure to alcohol, tobacco and drugs is part of this reality. Schools need to reflect upon how they might provide for the needs of their student cohort and respond appropriately to what are sometimes sensitive and emotive issues.

• The Education Act 1998 provides that schools should promote the social and personal development of students and provide health education for them.

• The National Drugs Strategy, ‘Building on Experience’† is now Government policy and it requires schools to have a substance use policy in place.

• The recent report from the National Advisory Committee on Drugs entitled ‘Drug use prevention’‡ (November 2001) underlines the importance of schools developing substance use policies.

† Available at www.pobail.ie
‡ Available at www.nacd.ie
The 1999 European School Survey Project on Alcohol and other Drugs (ESPAD) Report 3 highlighted the seriousness of the problem among 16 year olds in Ireland, as compared to the other 29 ESPAD countries surveyed. Alcohol was identified as being the dominant drug of misuse in Ireland whilst the use of tobacco and other drugs was above the ESPAD average.

For the population as a whole, alcohol consumption per capita in Ireland has increased by 41 % in the period 1989 to 1999, while the other EU Member States showed either a decrease or a modest increase. Ireland now has the second highest per capita consumption of alcohol in the EU.

What is a substance use policy and how is it developed?
A substance use policy sets out, in writing, the framework within which the whole school community manages issues relating to substance use. It should reflect the unique ethos of the school and should aim to develop a shared understanding of the term ‘drugs’.

A partnership approach based on the ‘whole school’ model is recommended for the development of the policy. The policy applies to the entire school community, including teachers, students, parents/guardians and users of the school building. It is strongly recommended that schools within the same community should collaborate on policy development.

The process of developing a substance use policy is best undertaken in a step-by-step approach as outlined in the seven steps to follow:

Step 1: Establish a core committee to develop a policy
Step 2: Study relevant resource documents and legislation
Step 3: Review the current situation in the school regarding substance use policy issues
Step 4: Prepare a draft policy statement
Step 5: Publicise, revise/amend and finalise the draft policy
Step 6: Ratify, circulate and implement the agreed policy
Step 7: Monitor, review and evaluate the policy

A full copy of these guidelines, with a breakdown of the steps involved, is available from the DES website: www.education.ie.

For further help in developing schools policy contact your Area Health Board, Primary Curriculum Support Programme, School Development Planning Initiatives Primary and Second Level, Regional Development Officer (SPHE Support Service, Post-Primary). Within Local Drug Task Force Areas primary schools can contact the Walk Tall Support Officers (see contacts sections) or the Task Force Office.
In the past many sensitive or difficult issues, such as substance use and sexual health, were often covered in one-off talks or short courses provided by individuals and agencies from outside the school. Research has demonstrated that this approach to social, personal and health education is at best ineffective and in some instances detrimental. However, when appropriate inputs from visitors are fully incorporated into the SPHE curriculum, they add value to the teacher led programme and enhance student understanding and learning.

When considering inviting a visitor to the school, the following may be of assistance:

- The visitor should complement but not replace the teacher.
- Teachers need to be careful that particular aspects of the SPHE programme are not sensationalised by the decision to invite a visitor, by the choice of visitor or by the content covered during the visit.
- Talk to colleagues to find out what their experience of visitors has been and with which visitors they and their students have had positive learning experiences.
- When it has been decided to invite a particular individual/agency it is good practice to organize a meeting with them two to three weeks prior to the visit. The following points could be included in the discussion:
  - how the visit fits into the overall SPHE strand/module
  - the age, gender, ability, social and cultural background of students
  - the number of students involved
  - the duration of the input
  - the ethos of the school
  - the content, methodologies and audio-visual material to be used
  - boundaries/confidentiality and how sensitive issues will be handled
what might be covered by the students both before and after the visit
what kind of room/equipment is required/available to be used
is there anything in school policy around parental consent; if so how is this to be gained. Should both teacher and visitor be involved in either writing to or briefing, parents beforehand
how you will evaluate the input

Although some visitors may prefer that the teacher is not present, it is recommended that the class teacher stay with the class for the duration of the input. This safeguards the students, the teacher and the visitor in both child protection and insurance matters. It ensures that the teacher is aware of exactly what was covered should any issue arise at a later stage and that the visitor has understood the school ethos.
Suspecting or discovering that a young person is involved in substance use can give rise to a range of emotions such as anxiety, anger, concern, fear and powerlessness. All of these feelings are valid because most adults find it difficult to understand the arena of youth culture and this coupled with a low level of factual information on substances and substance use often increases the sense of apprehension.

It must be remembered that within the school setting it is not just students who may be involved in substance use but also any individual who is part of the school community whether principal, teacher, support staff or parent. Therefore, any number of drug related scenarios could potentially emerge. These may include finding a substance, seeing something suspicious being passed from one person to another, observing a ‘stoned’ parent arriving to collect a young child from school, noticing a teacher who comes to school smelling strongly of alcohol or finding a child inhaling solvents. How a school responds to these incidents may be crucial not only to the individuals directly involved but also to the whole school community.

Rather than putting forward a list of scenarios and possible responses each school needs, within the context of its ethos, to decide on its own course of action, guided in the first instance by the Children First National Guidelines for the Protection and Welfare of Children along with school policy on substance use. In attempting to deal effectively with such instances, the following questions may be of use and should at least stimulate discussion on the issue.

- Whose responsibility is it to deal with the incident?
- Does your school have a substance use incident report form?
Who is responsible for filling it out and does the person against whom the complaint is being made have an opportunity to see what has been written?

Who should be informed of the incident?

Will the Gardaí be notified in all instances or only in certain instances?

If a substance is found, how should it be identified and by whom?

Will the substance be stored on the school premises – by whom, where and for how long and how will it be disposed of?

Is each staff member aware of the national guidelines on child protection and are all members of the school community aware of the school policy on substance use?

Is each staff member in the school aware of the law regarding their power to search an individual or their property?

Is each staff member aware of what their immediate response should be on discovering someone actively using substances on the school premises?

Is each adult aware of how to respond in a medical emergency?

Have the different courses of action that may be taken following an incident been discussed (at length and with a range of people from both inside and outside the school)? Will the school’s response be identical in every case or will there be flexibility depending on the specific circumstances?

Will the individual involved (and/or their parent/s if relevant) have a role to play in deciding the course of action the school should take?

Is your school aware of the support agencies available within the wider community?
Drugs/HIV Helpline
Freephone 1800 459 459

The Eastern Regional Health Authority has set up a helpline, which is designed to provide support, information and guidance available in respect of alcohol and drug misuse. It operates from Monday to Saturday between 10 a.m. and 5 p.m.

Health Board Community Services
These include Area Medical, Environmental Health, Health Education and Promotion, HIV/AIDS Services, Child Health Examinations, Child Abuse Prevention, Public Health Nursing, General Practitioner, Child and Family Psychiatry, Social Work, Child Care and Family Support and Community Psychology. Within the Eastern Region these services can all be contacted at one of the ten Community Services offices or your local health center

East Coast Area Health Board
- Community Services Area 1. Tivoli Road, Dun Laoghaire, Co. Dublin. Tel: 01 284 3579
- Community Services Area 2. Vergemont Hall, Clonskeagh, Dublin 6. Tel: 01 269 8222
- Community Services Area 10. Glenside Road, Wicklow. Tel: 0404 68400

South Western Area Health Board
- Dublin South City
  Carnegie Building, 1-25 Lord Edward St, Dublin 2.
  Tel: 01 679 2611
- Dublin West
  Cherry Orchard Hospital, Dublin 10.
  Tel: 01 626 8101, 01 626 7914
- Dublin South West
  Health Centre, Old County Road, Dublin 12.
  Tel: 01 454 2511
Drug Treatment Services
A number of treatment options are available for both adults and young people who may be experiencing problems related to alcohol or drug use. For further information about these services contact:

Drug Advisory and Treatment Centre
Trinity Court, 30/31
Pearse Street, Dublin 2. Tel: 01 677 1122

Drugs/AIDS Services:
- South Western Area Health Board.
  Bridge House, Ballyfermot, Dublin 10. Tel: 01 620 6400
- East Coast Area Health Board.
  Centenary House, Dun Laoghaire. Tel: 01 280 3335
- Northern Area Health Board.
  Phibsboro Tower, Dublin 7. Tel: 01 882 0300

Alcohol Services
- East Coast Area Health Board:
  Baggot Street Community Alcohol Treatment Unit.
  Tel: 01 660 7838
- South Western Area Health Board:
  Community Alcohol Services
  Tel: 01 451 6589/754
- Northern Area Health Board:
  Stanhope Treatment Centre.
  Tel: 01 677 9447

Medical Support and Information
In the event of a suspected drug overdose/poisoning by alcohol or drugs, early medical intervention saves lives. In case of a medical emergency call 999 or 112.
Accident and Emergency Departments:

- The Adelaide and Meath Hospital Incorporating the National Childrens Hospital, Tallaght. Tel: 01 414 3500 (Children) Tel: 01 414 3558
- Beaumont Hospital. Tel: 01 809 2714
- General Hospital, Naas. Tel: 045 897 221
- James Connolly Memorial Hospital, Blanchardstown, Dublin 15. Tel: 01 821 3844
- Mater Misericordiae Hospital Tel: 01 803 2200
- St. Colmcille's Hospital, Loughlinstown. Tel: 01 282 5800
- St. James's Hospital. Tel: 01 416 2782
- St. Michael's Hospital, Dun Laoghaire. Tel: 01 280 6901
- St. Vincent's Hospital Tel: 01 209 4358
- Poisons Information Services Beaumont Hospital, Dublin 9. Tel: 01 837 996601, 01 837 9964

Garda Síochána

Garda Juvenile Diversion Programme: Contact your local Garda Station to get the name of the local Juvenile Liaison Officer and/or Community Garda who are available for advice and educational support.

Local Drug Task Forces

The local Drug Task Forces were set up in 1997 to implement local action plans and implement community based initiatives, which were designed to compliment and add value to the drug programmes and services already being provided or planned by the State Agencies. Some of the types of measures funded include:

- “Stay at School” projects and after-school activities, aimed at children involved or at risk of becoming involved in drugs
- The development of activities aimed at “at risk” children and young people outside the school setting (in youth clubs, etc.)
- The provision of training on drug issues for local parents, teachers, youth workers, Gardaí and others

<table>
<thead>
<tr>
<th>Location</th>
<th>Tel:</th>
<th>Fax:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballyfermot</td>
<td>01 620 6412</td>
<td>01 620 6401</td>
</tr>
<tr>
<td>Ballymun</td>
<td>01 842 4630</td>
<td>01 842 4466</td>
</tr>
<tr>
<td>Blanchardstown</td>
<td>01 822 0221</td>
<td>01 822 1092</td>
</tr>
<tr>
<td>Bray</td>
<td>01 286 8266</td>
<td>01 286 8700</td>
</tr>
<tr>
<td>Canal Communities</td>
<td>01 620 6413</td>
<td>01 620 6401</td>
</tr>
<tr>
<td>Clondalkin</td>
<td>01 457 9445</td>
<td>01 457 9422</td>
</tr>
<tr>
<td>Cork</td>
<td>021 4923135</td>
<td>021 4923137</td>
</tr>
<tr>
<td>Dublin North East</td>
<td>01 847 9788</td>
<td>01 847 9525</td>
</tr>
<tr>
<td></td>
<td>(Coolock, Darndale, Donnycarney, Kilbarrack)</td>
<td></td>
</tr>
<tr>
<td>Dublin 12</td>
<td>01 620 6422</td>
<td>01 620 6401</td>
</tr>
<tr>
<td></td>
<td>(Crumlin, Drimnagh, Kimmage, Walkinstown)</td>
<td></td>
</tr>
<tr>
<td>Dun Laoghaire/Rathdown</td>
<td>01 280 3335</td>
<td>01 230 0690</td>
</tr>
<tr>
<td>Finglas/Cabra</td>
<td>01 882 0311</td>
<td>01 882 0330</td>
</tr>
<tr>
<td>North Inner City</td>
<td>01 836 6592</td>
<td>01 855 3395</td>
</tr>
<tr>
<td>South Inner City</td>
<td>01 620 6400</td>
<td>01 620 6401</td>
</tr>
<tr>
<td>Tallaght</td>
<td>01 620 6414</td>
<td>01 620 6401</td>
</tr>
</tbody>
</table>
Teaching Resources

- Educational materials relevant to Social, Personal and Health Education including smoking, alcohol and drug use, are held in the Health Promotion Departments (HPD) of the Area Health Boards. Some of the programmes are available only on completion of a training course.
- For more information please contact your local HPD.
- A range of resources is also available from your local Education Centre

Teaching Programmes – Primary Schools:
The Walk Tall Programme (the Substance Misuse Prevention Programme for Primary Schools)

This Programme is a comprehensive Social, Personal and Health Education Programme with a particular focus on Substance Misuse for all classes from Junior Infants to 6th Class. It includes components aimed at developing young peoples’ life-skills and emotional well being. Walk Tall was initially a National Pilot Programme run by the Department of Education and Science and was offered to all designated disadvantaged schools. Following the success of the Pilot phase the programme was offered to all schools nationwide. More than 3,000 schools availed of the training and the materials. The Walk Tall Programme is a resource to address the SPHE curriculum. In-service training on the programme is provided for teachers to support its implementation in the context of SPHE. In-service training is provided for teachers in implementing this programme. For further information, contact:

The Walk Tall Programme
Dublin West Education Centre
Old Blessington Road,
Tallaght, Dublin 24.
Tel: 01 452 8001
E-mail: walktall@eircom.net

Support Services for Primary Programmes:

Primary Curriculum Support Programme (PCSP)
SIAC Building, Monastery Road, Clondalkin, Dublin 22
Email: eolas@pcsp.ie/admin@pcsp.ie
Tel 01 464 2227, Callsave 1850 695 969
Fax 01 464 2288

Teaching Programmes – Post Primary Schools:
On My Own Two Feet

Developed by the Department of Education and Science, Department of Health & Children and Mater Dei Counselling Centre. This is an educational package for use with all post primary students aimed at the development of personal and social skills for the prevention of substance misuse. For further information, contact:

S.P.H.E. Support Service (Post-Primary)
Marino Institute of Education, Griffith Avenue, D9.
Tel: 01 805 7718
E-mail: sphe@mie.ie
Fax: 01 853 5113
Programmes for Parents and the Community
Contact your local Area Health Board or local Drug Task Force for details of local courses and services.

Other Resources
The Health Promotion Departments within your local health board also distributes a wide range of leaflets and posters on smoking, alcohol and illegal drugs. A full order form is available on request.

National Documentation Centre on Drug Use
There is access to most Irish research on drugs and addiction on the NDC’s website (www.hrb.ie/ndc). There is also access to academic journals and inter library loan; access to bibliographic databases such as PsycINFO, Social Science Citation Index and Pubmed; a good collection of books and reports providing international information on drugs and addiction, internet and printing facilities available in the library. This service is available free of charge and there are qualified professional staff on site to assist users. Address:

National Documentation Centre on Drug Use
Drug Misuse Research Division
Holbrook House, Holles Street
Dublin 2, Ireland
Tel: 01 676 1176 Fax: 01 661 8567

Blanchardstown Drug Education Resource Centre
Blanchardstown Drug Education Resource Centre, is dedicated to information on all aspects of drugs, including prevention, education, treatment and rehabilitation. The collection of books, journals, reports and supporting programmes covers a wide range of subjects. Address:

Blanchardstown Drug Education Resource Centre
104a Coolmine Industrial Estate (above JJ Carpets)
Coolmine, Dublin 15
Tel: 01 821 92140/ 821 1333
Fax: 01 821 9259
Email: drugresources@eircom.net

Drug Education Workers Forum
Drug Education Workers Forum, provides an open forum to enable networking, information exchange and support among drug education workers, with a membership drawn from community, voluntary and statutory agencies. It also provides a platform for lobbying to improve the resources available to the drug education sector. The Forum can be contacted at: dewfireland@lycos.com or DEWF PO Box 9364, Dublin 1
Further Reading

The following may be of interest if you wish to further develop your understanding of drugs and their use:

- Facts About Drug Misuse in Ireland
  Dr. D. Corrigan
  Health Promotion Unit, Department of Health & Children, Dublin 2003 4th ed.

- A Global History of Narcotics 1500-2000

- Living With Drugs

- Psychoactive Drugs and Harm Reduction: from faith to science
  Eds. N. Heather, A. Wodak, E. Nadelmann and P. O’Hare
  Whurr, London, 1999

- Drug Misuse – Prevention, Harm Minimisation and Treatment

- Drug Education: A Social and Evaluative Study
  E. Kiely and E. Egan, Cork LDTF, Cork, 2000

- The Politics of Drugs – from production to consumption
  P. King, The Liffey Press, Dublin, 2003

- Drug Use Prevention – Overview of Research
  Dr. M. Morgan, NACD, Dublin 2001

- Rethinking the War on Drugs in Ireland
  T. Murphy, Cork University Press, Cork, 1996

- Excessive Appetites, A Psychological View of Addictions
  J. Orford, Wiley, Chichester, 2001

- Illegal Leisure, the normalisation of adolescent recreational drug use

Websites

One of the greatest strengths of the web is that it allows anyone with access to what is now fairly basic technology to put their thoughts, views, prejudices and work up there for everyone to see but, just because it is on the web, it does not automatically mean that it is true and/or accurate. If you or your students are using the web in relation to drugs education it is important to ask:

- How reliable is the information?
- Where is it coming from?
- What agenda is driving it and how accurate is it?

Most of the sites listed here are either run by governments or academic institutions and, whilst that fact in itself is no guarantee of their truth or accuracy, what it does mean is that the information posted on their sites should have been developed, researched and written within an academic framework with transparency and accountability. This means that the work should contain references and bibliographies, be research and evidence based and subject to peer review.
<table>
<thead>
<tr>
<th>Web Address</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.dwec.ie/walktall">www.dwec.ie/walktall</a></td>
<td>The Walk Tall Programme website</td>
</tr>
<tr>
<td><a href="http://www.sphe.ie">www.sphe.ie</a></td>
<td>Social, Personal and Health Education Support Service (Post-Primary)</td>
</tr>
<tr>
<td><a href="http://www.pcsp.ie">www.pcsp.ie</a></td>
<td>The Primary Curriculum Support Programme Website</td>
</tr>
<tr>
<td><a href="http://www.drugsinfo.ie">www.drugsinfo.ie</a></td>
<td>The website of Ireland’s current national drug awareness campaign</td>
</tr>
<tr>
<td><a href="http://www.dap.ie">www.dap.ie</a></td>
<td>The website of the Drugs Awareness Programme (DAP), a project of Crosscare. Ireland’s first interactive website providing continually updated drug information and live online support for three target groups: young people, parents and professionals. It includes a Live-Helper Messaging system whereby a visitor to the site can type in an enquiry which a trained counsellor replies to, there and then, in complete confidentiality</td>
</tr>
<tr>
<td><a href="http://www.hrb.ie/ndc">www.hrb.ie/ndc</a></td>
<td>National Document Centre on Drug Use Ireland – provides access to most Irish research on drugs and addiction, most of it available on the website. Access to academic journals and inter library loan. Access to bibliographic databases such as PsycINFO, Social Science Citation Index and Pubmed.</td>
</tr>
<tr>
<td><a href="http://www.doh.ie">www.doh.ie</a></td>
<td>Department of Health &amp; Children, Ireland, you can also access other Irish government sites from here</td>
</tr>
<tr>
<td><a href="http://www.irishhealth.com">www.irishhealth.com</a></td>
<td>Ireland’s independent health website</td>
</tr>
<tr>
<td><a href="http://www.emcdda.eu.int">www.emcdda.eu.int</a></td>
<td>European Monitoring Centre for Drugs and Drug Addiction</td>
</tr>
<tr>
<td><a href="http://www.unodcp.org">www.unodcp.org</a></td>
<td>United Nations Office on Drugs and Crime</td>
</tr>
<tr>
<td><a href="http://www.unesco.org/education/eduprog/ped">www.unesco.org/education/eduprog/ped</a></td>
<td>UNESCO Drug Abuse Prevention</td>
</tr>
<tr>
<td><a href="http://www.unaids.org">www.unaids.org</a></td>
<td>United Nations AIDS Project</td>
</tr>
<tr>
<td><a href="http://www.bmj.com">www.bmj.com</a></td>
<td>British Medical Journal (has an excellent search facility)</td>
</tr>
<tr>
<td><a href="http://www.drugs.gov.uk">www.drugs.gov.uk</a></td>
<td>Cross department website looking at national and local responses to drug use in the UK</td>
</tr>
<tr>
<td><a href="http://www.drugscope.co.uk">www.drugscope.co.uk</a></td>
<td>Drugscope website contains information and resources on a range of drug issues</td>
</tr>
<tr>
<td><a href="http://www.nida.nih.gov">www.nida.nih.gov</a></td>
<td>National Institute on Drug Abuse (US)</td>
</tr>
<tr>
<td><a href="http://www.rand.org">www.rand.org</a></td>
<td>RAND is a non-profit institution that helps improve policy and decision making through research and analysis, it has done considerable research looking into the effectiveness of schools based drugs education</td>
</tr>
<tr>
<td><a href="http://www.who.int/school-youth-health">www.who.int/school-youth-health</a></td>
<td>WHO Health Promotion Schools</td>
</tr>
<tr>
<td><a href="http://www.who.org">www.who.org</a></td>
<td>World Health Organisation</td>
</tr>
<tr>
<td><a href="http://www.epa.be">www.epa.be</a></td>
<td>European Parents Association</td>
</tr>
<tr>
<td><a href="http://www.education.ie">www.education.ie</a></td>
<td>Department of Education and Science</td>
</tr>
</tbody>
</table>

A Directory of Contact Details of many education bodies/ institutes throughout the country, is available on the Department’s website under Reports and Publications.
References

1. Developing Policy on Alcohol, Tobacco and Drug Use – Guidelines for Schools, Area Health Boards of the ERHA, p.1
5. DSM-IV-TR ibid. p.197
11. Stockwell, T., “Problem drinking in the community”
13. Developing Policy on Alcohol, Tobacco and Drug Use – Guidelines for Schools, Area Health Boards of the ERHA, appendix IV, p.8
37. Table adapted from Corrigan D. (2003) ibid. p.27
38. ‘D.A.Y. Drink Awareness for Youth – An Alcohol Education Resource Pack’ National Youth Council of Ireland, Health Promotion Unit, Department of Health and Youth Affairs Section Department of Education, Booklet 2 Information on Alcohol p.8
44. Adapted from ‘D.A.Y. Drink Awareness for Youth – An Alcohol Education Resource Pack’ Booklet 2 Information on Alcohol p.19
47. The National Health and Lifestyles Surveys (2003), Health Promotion Unit, Department of Health & Children, Dublin, p.34
60 Corrigan D., ibid. (2003) p.39
64 ‘Solvent Abuse, A Guide for Professionals and Teachers’ Health Promotion Unit, Department of Health & Children, Dublin, p.22
67 NACD/DAIRU (2003) ibid. p.3
73 Hall and Solowij (1998) ibid. pp.1611-1616
74 Corrigan (2003) ibid. p.43
76 Hall and Solowij (1998) pp.1611-1616
79 Hall and Solowij (1998) pp.1611-1616
80 Advisory Council on the Misuse of Drugs (2002) p.6
81 Corrigan D., (2003) ibid. p.43
82 Corrigan D., (2003) ibid. p.43
86 Corrigan D., (2003) ibid. p.44
87 DSM 1V (2000) ibid. p.238
103 Winstock et al (2001) p.9-17
106 Mayock (2000) ibid. p.80-152
107 NACD/DAIRU (2003) ibid., p.3
110 Southwell (2003) pp. 8-9
112 Mayock (2000) p.83