

# Addressing Substance Use in Canadian Schools

Responding to the Needs of **HIGHER RISK YOUTH**

A Knowledge Kit for Counsellors and Health Workers  
2009

This knowledge kit is part of a series of resources based on evidence drawn from published research and practical literature as well as from the experience of educators across Canada. It seeks to set out the strategies most effective in addressing substance use in schools. All of the kits are linked by a commitment to a population health perspective that underpins the comprehensive school health approach and a common conceptual frame for understanding substance use and the related risks and harms. That said, each kit in the series is designed to stand on its own and is written with a different audience in mind. As a result, some duplication of content is inevitable. This kit is designed to help school counsellors and other professionals within the school to address the needs of students experiencing, or at risk of experiencing, harm from substance use.

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This kit was developed for the Joint Consortium for School Health by the Centre for Addictions Research of BC. While the views expressed herein are those of the authors, the Centre wishes to acknowledge the many people who provided assistance by critiquing early drafts, drawing attention to examples of good practice or sharing their personal knowledge. The authors hope that this kit will encourage dialogue and action and result in improved outcomes for Canadian students.

The *Addressing Substance Use in Canadian Schools* series includes:

***Effective Substance Use Policy***

*A Knowledge Kit for School Administrators*

***Effective Substance Use Education***

*A Knowledge Kit for Teachers*

***Responding to the Needs of Higher Risk Youth***

*A Knowledge Kit for Counsellors and Health Workers*

***School-Family-Community Partnerships***

*A Knowledge Kit for School and Community Leaders*

Copies can be obtained from [www.jcsh-cces.ca](http://www.jcsh-cces.ca).

## Up Front

*Media headlines warn us about some “new” drug with articles going on to explain how teens are destroying their lives faster and more completely than ever. And editorial sections suggest that schools ought to do something.*

We are constantly confronted with messages designed to raise our fears and, at the same time, we gravitate to positions that assign the responsibility to fix the problem to someone else. But what if you are that someone else?

If you are, then it’s a good idea to start by knowing the truth. It is true that alcohol, tobacco and a wide range of other psychoactive substances are readily available to young people. But not all young people are destroying themselves; in fact, most young people do not use illegal drugs. That said, many do put themselves at risk by using alcohol or other substances in ways that might result in injury or death.

### EDUCATION IS GOOD

In order to make healthy choices about substances throughout their lives, all students should be exposed to educational experiences that increase their social and emotional competence and overall health literacy. Among other things, *universal classroom education* should convey accurate information on the risks and benefits of psychoactive substance use and provide training on the practical skills necessary for applying this information in day-to-day life. Participatory education methods, which actively involve students in a skill-based learning process, provide the most effective means of generating the practical knowledge and life skills that make up health literacy.<sup>1</sup>

### EDUCATION IS NOT ENOUGH

It is easy to suggest that schools need to teach our children to avoid drugs. But addressing substance use-related issues is just not that simple. Despite big claims for drug prevention education, most scientific evaluations suggest that drug education programs have had little success. The provision of information has been ineffective in changing substance use-related behaviour. Without a doubt, this is partly a result of ineffective approaches that have been used and the propaganda-like messages that increase the likelihood of students seeing drug education as irrelevant. Substance use is a cultural reality; addressing the related risks and harms requires a comprehensive approach that is much more than classroom education.

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<sup>1</sup> For more information, see the companion knowledge kit, *Effective Substance Use Education*.

## COMPREHENSIVE SCHOOL HEALTH

Schools have been dealing with the complex issues related to adolescent substance use for decades. A body of knowledge has emerged, providing insight into what is most effective at increasing the protective factors that mitigate risk and help create health-promoting schools where students gain the knowledge and skills they need to effectively navigate a substance-using world.

This encompasses the whole school environment, with actions addressing four distinct but inter-related components that provide a strong foundation for comprehensive school health: social and physical environment, teaching and learning, healthy school policy, and partnerships and services.

## SUPPORTING HIGHER RISK YOUTH

Despite the significant problems related to substance use, specialized alcohol and other drug services tend to engage only those individuals whose problems have become moderate or severe. Significant attention has been given to the concept of risk and protective factors. The ability to influence these factors is linked to capacity for early identification and intervention. Schools have been identified as appropriate settings for this early identification and intervention while problems related to capacity have been noted. In addition, school connectedness is one of the most significant protective factors for a wide range of issues including substance use, suicide and violence. Implementing a range of early intervention strategies not only helps young people, but also improves retention and educational outcomes.

## HELPING SCHOOLS TO CHART THEIR COURSE

The material in this knowledge kit is arranged around the 5-i model of constructivist education developed by the Centre for Addictions Research of BC.<sup>2</sup> The model moves from *identifying* what we currently know to *investigating* the evidence base and *interpreting* the findings for our context. It also asks us to *imagine* possible outcomes and alternatives and *integrate* what we have learned into our policies and practices. The goal is to provide practical and effective support to school counsellors and other professionals (who are not substance use specialists) in addressing student substance use and related harms. This involves (a) helping Canadian students acquire the knowledge and skills necessary to make healthy choices in a society where alcohol and other substances are available, and (b) in particular, helping those students who are using psychoactive substances to assess the risks and harms related to their use.

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<sup>2</sup> See discussion of constructivist education and the 5-i model at [www.iminds.ca](http://www.iminds.ca).

## AT A GLANCE

A COMPREHENSIVE APPROACH	1
<p>Substance use and substance use-related harm can best be addressed using a population health perspective that recognizes the relationship between individual risk factors and social conditions. In a school setting, this means the needs of higher risk students should be understood and responded to using policy, learning opportunities, support services and partnerships that promote social cohesion; all essential elements of comprehensive school health.</p>	
IDENTIFY	4
<p>Most human beings use psychoactive substances. Knowing what they are, why people use them and the factors that contribute to the potential for this use to result in harm is an important foundation for preventing and reducing that harm. Substance use by Canadian youth is not increasing and tends to follow the pattern set by adults.</p>	
INVESTIGATE	15
<p>Substance use impacts both social and educational development. Schools have traditionally used curriculum approaches to promote prevention. The evidence suggests schools can also contribute effectively to their educational mandate by developing a continuum of services and supports that promote early identification and intervention for higher risk youth.</p>	
INTERPRET	25
<p>Identifying good practices supported by the evidence is relatively easy. Applying good practice in a particular context requires thoughtful interpretation of both the context and the applicability of the evidence. This kit offers some probing questions to help the reader in this process.</p>	
IMAGINE	31
<p>Drawing attention to real life examples, this section demonstrates some possible ways to implement good practices and encourages you to take action in your school.</p>	
INTEGRATE	34
<p>Using a simple change management model and a few basic tools, you can assess the current practice in your school and plan and implement change.</p>	
RECOMMENDED RESOURCES	BACK

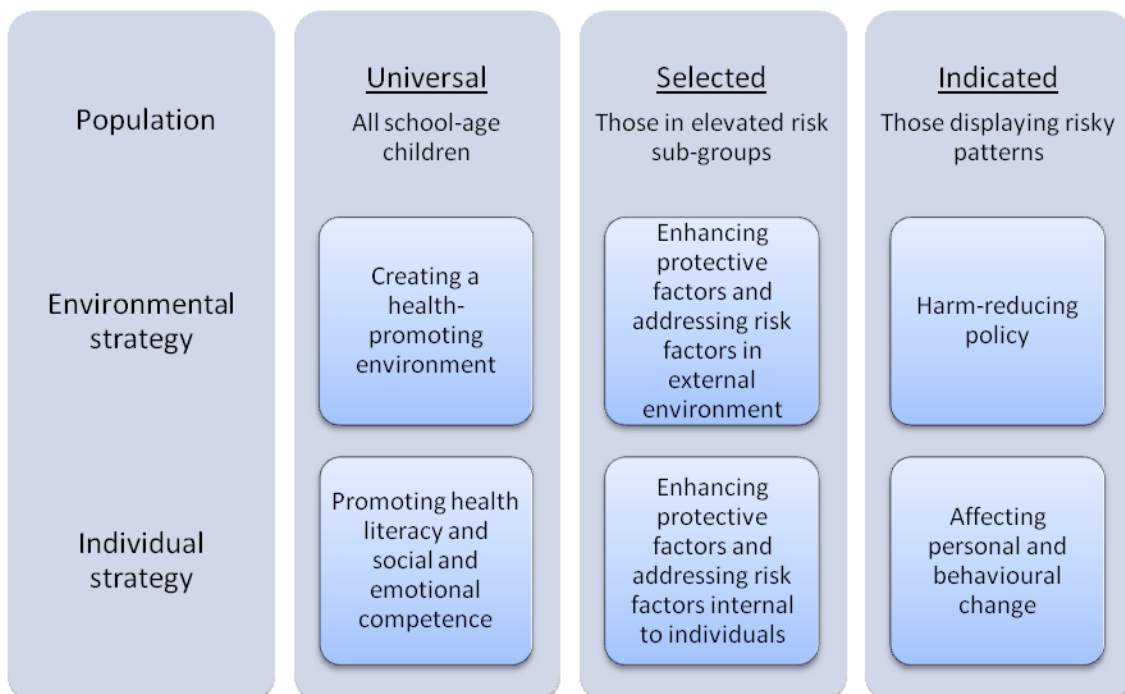


## A COMPREHENSIVE APPROACH

Population health involves complex interactions between individual risk factors and broad social conditions. The latter are themselves complex factors involving history, culture, politics and economics. Substance use and substance use-related harm must be addressed within this complexity. Recent research has demonstrated that substance use and substance use-related harm share common determinants with other complex psychosocial problems. Narrow approaches that focus only on individual behaviours or material factors are unlikely to have much impact. This has led to an emphasis on more comprehensive approaches.

### POPULATION HEALTH

A comprehensive approach can be seen as involving a matrix of environmentally and individually focused initiatives at three levels of population specificity, as indicated in the model below. The tendency has been to focus on individual strategies and the needs of the indicated population even when delivering services at the universal level. The knowledge kits in this series seek to help school professionals plan and implement a balanced and comprehensive approach involving several components that together address all six areas in the matrix effectively.



## COMPREHENSIVE SCHOOL HEALTH

In the school setting, this population health approach is known as comprehensive school health. Comprehensive school health is an internationally recognized framework for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated and holistic way. It has grown out of the vision set out in the World Health Organization's Ottawa Charter for Health Promotion (1986). Comprehensive school health involves attention to the whole school environment, with four inter-related areas for action need to be addressed. Students need to be exposed to learning opportunities that help them gain the knowledge and skills required to maximize their health and well-being. They need to develop quality relationships with peers, teachers and other school staff in a healthy environment. This requires policies, procedures, management practices and decision-making processes that promote health and healthy environments. Comprehensive school health also requires a continuum of school- and community-based services that support and promote student and staff health and well-being as well as a culture of partnership between schools, families and the community.



## ADDRESSING SUBSTANCE USE IN CANADIAN SCHOOLS

The *Addressing Substance Use in Canadian Schools* series includes four knowledge kits that together support a comprehensive school health approach to substance use-related issues. Each kit provides a review of the evidence and a discussion of the issues relevant to specific school professionals operating in relevant areas of action.

### SCHOOL POLICY

Policy initiatives can be designed to create a health-promoting school environment within which other interventions operate. By clearly defining universal expectations within the school environment, they provide some of the most powerful mechanisms for socialization and shaping individual behaviours. Policy effectiveness will be maximized when the policies support environmental protective factors and minimize risk factors. Clear and fair responses to non-compliance are an important part of policy. These need to reflect the evidence on effectiveness and be consistent with messages

delivered in other components. Policy issues are discussed more fully in the companion knowledge kit, *Effective Substance Use Policy: A Knowledge Kit for School Administrators*.

#### UNIVERSAL EDUCATION

Universal education has an important place in a comprehensive approach; however, it has to be acknowledged that much drug education has been ineffective and may even have been damaging.<sup>3</sup> Universal education should seek to *educate* students about substances: their history, role in society, their advertising and the potential harms and benefits related to their use. The overall goal should be to increase the health literacy of students relative to substance use; that is, to provide them with the knowledge and skills needed to maximize their health within their environment. More details about substance use education can be found in the companion knowledge kit, *Effective Substance Use Education: A Knowledge Kit for Teachers*.

#### SCHOOL-FAMILY-COMMUNITY

Consistency between school and community is important. This does not mean, however, that the school should simply reflect community norms and common beliefs. The school has a role in influencing the community. At the same time, careful consideration of community values and norms will help in the development of effective and contextually relevant policy and educational strategies. Investments in building school-family-community partnerships can contribute to this bi-directional flow and to the effectiveness of the educational efforts of the school. The knowledge kit, *School-Family-Community Partnerships: A Knowledge Kit for School and Community Leaders* seeks to raise awareness of the importance of these partnerships within a comprehensive approach and to provide some evidence-informed guidance in nurturing them.

#### TARGETED PROGRAMS AND SERVICES

Higher risk youth often come from socially or economically marginalized groups or have personal factors that contribute to real or perceived disconnection. These students require greater levels of support. Universal education programs lack sufficient focus or intensity to address their needs. Responding effectively to these youth involves helping them develop strong linkages within the school environment. This means helping them develop social and emotional competence and ensuring the school culture is supportive of their engagement. The following sections provide a framework, a summary of the evidence and tools to support school professionals in developing a continuum of programs and services targeted to these students.

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<sup>3</sup> Cahill, H. (2006). Devising classroom drug education programs. *Drug Education in Schools: Searching for the Silver Bullet*. Ed. R. Midford and G. Munro. Melbourne, Australia: IP Communications.

## IDENTIFY

In this section, we identify what we currently know about:

- substances
  - what they are
  - why people use them
- the factors that contribute to risk and harm related to substance use
  - the context in which they are used
  - the person who uses them
  - and the substance being used
  - as well as the way the substances are used
- substance use among Canadian youth

Schools seek to engage all students in constructive programs that will promote their educational and social development. Students, however, arrive at school with a variety of individual factors and environmental experiences that influence their ability to engage with those programs. Schools cannot go back and change the past.

Nonetheless, schools have an incredible power to change the future. When schools focus on developing student connectedness to family, peers and the school community, they nurture the protective systems that lead to resilience and maximize functioning at both the academic and social level. A positive relationship between a high-risk young person and a teacher can make the difference.<sup>4</sup> Addressing substance use within the school setting needs to recognize and respond effectively to the diversity of students, their strengths and their needs.

## WHAT ARE DRUGS?

A drug<sup>5</sup> is a substance that alters the way the body functions either physically or psychologically. The term “drug” thus applies to a wide range of different substances. Of particular concern are those that act on the central nervous system (CNS) to affect the way a person thinks, feels or behaves. These psychoactive substances include alcohol, tobacco and many other legal and illegal drugs.

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<sup>4</sup> Deed, C. (2006). School programs for high-risk students. *Drug Education in Schools: Searching for the Silver Bullet*. Ed. R. Midford and G. Munro. Melbourne, Australia: IP Communications.

<sup>5</sup> Throughout this knowledge kit, the words “drug” or “substance” are used interchangeably and primarily refer to psychoactive substances.

Drugs are often grouped as legal versus illegal, or soft versus hard. These categories can be confusing and misleading. The legal status of substances changes over time and location, and the concepts of “hard” or “soft” are impossible to define as the effects of any drug differ from situation to situation.

A more useful classification relates to the impact substances have on the central nervous system (CNS):

- **Depressants** decrease activity in the CNS (e.g., decrease heart rate and breathing). Alcohol and heroin are examples of depressants.
- **Stimulants** increase activity in the CNS and arouse the body (e.g., increase heart rate and breathing). Caffeine, tobacco, amphetamines and cocaine are stimulants.
- **Hallucinogens** affect the CNS by causing perceptual distortions. Magic mushrooms and LSD are examples of hallucinogens.

Despite its usefulness, this classification is not perfect. Many substances, such as cannabis, fit in more than one category while others do not fit at all. For more information on psychoactive substances, go to [www.carbc.ca/Default.aspx?tabid=202](http://www.carbc.ca/Default.aspx?tabid=202).

## WHY DO PEOPLE USE DRUGS?

There is no society on Earth that does not in some way celebrate, depend on, profit from, enjoy and also suffer from the use of psychoactive substances. Like most developed countries, Canada has a long tradition with—and of legally sanctioning the use of—older substances such as alcohol and nicotine. Multinational companies manufacture, advertise and sell these products for substantial profit to a large market of eager consumers while their governments and the communities they serve reap a rich harvest from tax revenues. They also reap another kind of harvest in terms of health, legal, economic and social problems which are mostly hidden from view.

The last century saw an upsurge in the cultivation, manufacture and trade of other psychoactive substances, some quite ancient and others new. Some have been developed from pharmaceutical products made initially for treating pain, sleep or mental health problems (e.g., heroin, barbiturates and benzodiazepines). Others have been manufactured for recreational purposes (e.g., ecstasy), while still others, notably cannabis, are made from plants or seeds that have been cultivated and traded to new and much larger markets. As with most countries, Canada has implemented legal sanctions supported by international treaties in its attempts to control the manufacture, trade and consumption of some of these products, though their use continues in varying degrees.

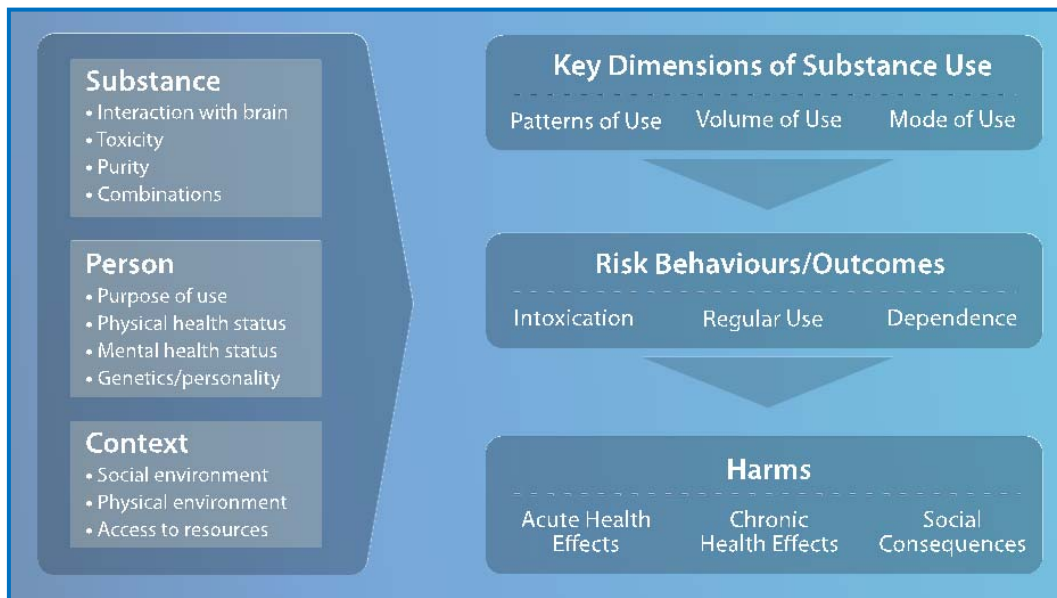
Around each of these substances, with their different effects on human behaviour and emotion, cultures and rituals have grown that shape traditions and patterns of use for particular purposes. For almost every type of human activity, there are substances used to facilitate that activity in some way (e.g., religious ceremonies, sport, battle, eating, sex, study, work, dancing, public performances and socializing).

In the case of adolescents, research suggests reasons for use include: curiosity, fun, self-discovery, to fit in, coping with stress, pain or boredom, staying awake to study, alleviating depression, out of habit, rebelliousness, weight loss and to aid sleep. These different motives for use powerfully influence the pattern of use and the risk of harmful consequences. If the motive for use is fleeting (e.g., curiosity), then only occasional or experimental use may follow. If the motive is a strong and enduring one (e.g., a chronic sleep or mental health problem), then more long lasting and intense substance use, with many problems, may follow. A shorter term but intense motive (e.g., to fit in, to have fun, to alleviate temporary stress) may also result in risky behaviour and harm such as injury or acute illness.

## SO WHAT IS THE PROBLEM?

Unfortunately, the wrong substance, or perhaps just the wrong dose of a substance at the wrong time and administered the wrong way, can not only impair performance but also lead to serious harm. The type of substance used (e.g., a stimulant such as caffeine or a depressant such as alcohol), the dose taken, the way in which it is taken (e.g., smoked, injected or drunk) and the setting in which use occurs can all influence whether the effect enhances or impairs performance or results in actual harm. Harmful consequences, for the user and those around them in the wider community, include social problems as well as injuries, illness and death.

While the use of almost any psychoactive substance by children or adolescents may be a cause for concern, there are a number of factors that determine how probable or serious the resulting harm may be. As shown in the model below, these factors can be categorized into those that are about the substance itself and its direct effects, those that arise out of characteristics of the individual user and those that describe the setting or context of use. These factors interact to influence the patterns and behaviours related to substance use and thereby determine levels of risk that may result in real harms.



## THE CONTEXT

Too often, the media and others focus on the drug. Yet the places, times and activities associated with substance use powerfully influence patterns of use and the likelihood of harm occurring. Alcohol use by teenagers in the absence of parental supervision is particularly likely to be high risk. Being in a situation of social conflict or frustration while under the influence of depressants such as alcohol or anti-anxiety drugs (e.g., benzodiazepines) can increase the likelihood of a conflict being resolved by violent means. Using such substances before or while engaging in physically hazardous activities, such as driving, boating or hiking on dangerous terrain, also increases the risk of injuries. The overall social and cultural context surrounding substance use will also influence the extent to which a young person has different substances available to them and is encouraged or restrained from using them.<sup>6</sup> The economic availability of different substances is critically important – the cheaper they are, the more likely they are to be used. This applies not only to legal substances like alcohol and tobacco but also to illicit substances. Family and friendship networks and the degree of engagement in, and connection to, the wider community all influence the likelihood of young people engaging in substance use as well as experiencing mental health or behavioural

<sup>6</sup> For example, in the 1970s, tobacco was quite widely used both by the adult and adolescent populations, while cannabis use was comparatively rare. Today, knowledge about the risks of tobacco use and a range of legal sanctions and restrictions on where people can smoke tobacco have resulted in fewer teenagers smoking tobacco. On the other hand, in almost all Canadian jurisdictions, cannabis has become increasingly available and, according to the Canadian Addiction Survey, past year use of cannabis by 17-19 year olds has increased from 25% in 1994 to 44% in 2004. Use by younger teens has remained stable at just below 30%.

problems. In contexts in which dialogue about substance use is common, use by youth is less common, presumably as a result of the respectful transmission of knowledge about appropriate use. The table on the following page includes some of the risk and protective factors<sup>7</sup> touching on these various contextual themes.

## THE PERSON

A variety of personal factors affect the probability that an individual will engage in risky substance use. These include current physical and mental health. For example, someone with anxiety or depression may try to feel better by drinking alcohol. There is some evidence that genetic inheritance and personality or temperament also have an impact. For example, tendencies towards sensation seeking (e.g., high on curiosity and need to find excitement) increase a person's risk of harm from substance use.

Environmental experience, however, shapes many of these and other factors that place individuals, and in particular young people, at increased risk. For example, personal experience of adverse life events, such as physical, sexual or emotional abuse, may impact the individual's physical or mental health. Awareness of this has led to increased emphasis on developmental pathways. The intention is to eliminate or reduce the preconditions for the development of a risk factor (e.g., by reducing children's access to alcohol to avoid early initiation; supporting families to reduce stress and the potential for trauma; or by providing early help in developing literacy skills to avoid academic failure). Not all risk factors can be eliminated, however. Neither can schools (or parents) reverse existing risk factors. In this case, the goal is to help mediate the risk impact by building resilience through increasing protective factors.

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<sup>7</sup> Considerable attention is given to risk and protective factors in the literature. As used here, *risk factors* are the social, environmental and individual factors that independently predict involvement in early and heavy drug use as well as a range of mental health and behavioural problems. *Protective factors* moderate and mediate the effect of risk factors by increasing resilience, although they do not, of themselves, directly influence the likelihood of drug use after adjusting for known risk factors. Risk factors act in a cumulative way over time. Some are present from the early years, others emerge in adolescence – but no single risk factor lies at the heart of drug-related problems. The more risk factors that persist over time, the greater the likelihood of significant impact on development. Programs should either enhance protective factors or eliminate risk factors where possible. See Loxley, W., Toumbourou, J., Stockwell, T.R., Haines, B., Scott, K., Godfrey, C., Waters, E., Patton, G., Fordham, R.J., Gray, D., Marshall, J., Ryder, D., Siggers, S., Williams, J. & Sanci, L. (2004). *The Prevention of Substance Use, Risk and Harm in Australia: A Review of the Evidence*. National Drug Research Institute and the Centre for Adolescent Health; Derzon, J.H. (2007). Using correlational evidence to select youth for prevention programming. *Journal of Primary Prevention*, 28, 421-447.

	RISK FACTORS	PROTECTIVE FACTORS
COMMUNITY	<ul style="list-style-type: none"> <li>• Economic disadvantage</li> <li>• Social or cultural discrimination or isolation</li> <li>• Availability of substances and high tolerance for use</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for meaningful participation in community groups and activities</li> <li>• Involvement with adult mentors and role models</li> </ul>
FAMILY	<ul style="list-style-type: none"> <li>• Low parental expectations</li> <li>• Tolerant parental attitudes towards teen alcohol/substance use</li> <li>• Parental mental illness or substance use problems</li> </ul>	<ul style="list-style-type: none"> <li>• Family nurturance and attachment</li> <li>• High level of participation with adults</li> </ul>
PEER	<ul style="list-style-type: none"> <li>• Peer rejection</li> <li>• Member of deviant peer group</li> </ul>	<ul style="list-style-type: none"> <li>• Member of pro-social peer group</li> </ul>
SCHOOL	<ul style="list-style-type: none"> <li>• Poor attachment to school</li> <li>• Poor school performance</li> <li>• Difficulty at transition points (e.g., entering school, transition to secondary school)</li> </ul>	<ul style="list-style-type: none"> <li>• Caring relationships within school community</li> <li>• High but achievable expectations</li> </ul>
INDIVIDUAL	<ul style="list-style-type: none"> <li>• Temperament (sensation seeking, poor impulse control)</li> <li>• High levels of aggression</li> <li>• Early regular substance use</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to genuinely experience emotions and assert needs</li> <li>• Sense of agency and optimism</li> <li>• Good literacy and capacity for problem solving</li> </ul>

## THE SUBSTANCE

All psychoactive substances have the potential to cause harm, but different substances pose different types and severity of risk. The legal classification of substances has little correlation to their potential to cause harm at the individual level<sup>8</sup> or to the actual harm measured at a population level.<sup>9</sup> For example, legal substances—alcohol and tobacco—contribute far more to the burden of disease than illegal substances, and cost the healthcare system much more than all illegal substances combined; therefore, they

<sup>8</sup> Nutt, D., King, L.A., Saulsbury, W., & Blakemore, C. (2007). Development of a rational scale to assess the harm of drugs of potential misuse. *The Lancet*, 369, 1047-1053.

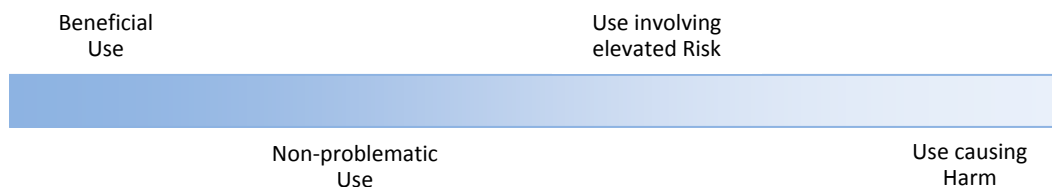
<sup>9</sup> Rehm, J., Baliunas, B., Brochu, S., Fischer, B., Gnam, W., Patra, J., Popova, S., Sarnocinska-Hart, A., & Taylor, B. (2006). The costs of substance abuse in Canada 2002: Highlights. Ottawa: Canadian Centre on Substance Abuse.

need to be the primary focus of interventions.<sup>10</sup> Moreover, tobacco kills more of its regular users than any other substance.

On the other hand, some illegal substances—notably heroin, cocaine and methamphetamine—can have devastating consequences for a small number of individuals who use them regularly. The high prevalence of cannabis use and the cultural associations of some substances such as ecstasy may warrant particular attention even though their potential for harm is less severe. The non-medical use of pharmaceuticals appears to be growing in some jurisdictions and also needs special attention.

### USE, RISK AND HARM

It is important to acknowledge that the careful use of many psychoactive substances can be harm free and even beneficial. Nonetheless, psychoactive substance use involves risk. Substance use can be regarded as being ranged along a continuum from mainly low-risk and sometimes beneficial use (e.g., opiate use for addressing acute pain), through potentially hazardous use to clearly harmful use (e.g., opiate injection using a non-sterile needle leading to infection).



Repeated use of a substance, especially on a daily basis, may pave the way for a strong habit or dependence, which can be hard to break. Some of the main signs of dependence are:

- increasing tolerance for a substance, meaning higher doses are required to get the same effect;
- increasing discomfort (psychological and physiological) when attempting or forced to abstain;
- increasing fixation on the substance at the expense of other activities.

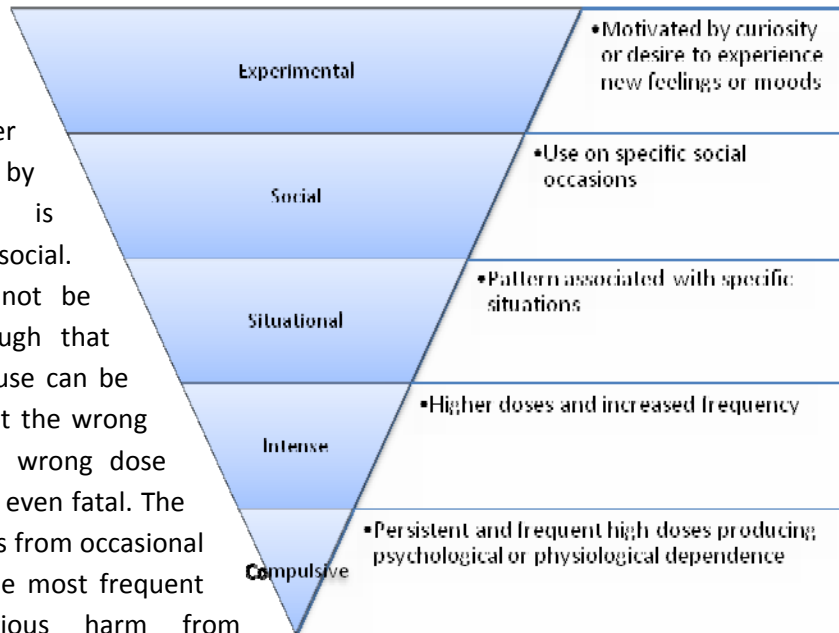
Such intense patterns of use tend to require significant funds to support the habit and compete with other social demands and expectations from family, school and the wider community. There is also evidence that patterns of intense use temporarily blunt the capability of an individual to experience pleasure in other ways – the reward centres of

<sup>10</sup> British Columbia Ministry of Health (2006). *Following the Evidence: Preventing Harms from Substance Use in BC*. Ministry of Health: Victoria, BC.

the brain have become "hijacked" by the need to be repeatedly provided with rewards from the drug of choice, whether it be alcohol, tobacco, cannabis or some other psychoactive substance.

As shown in the diagram on the right, most alcohol or other substance use by young people is experimental or social.

However, it cannot be emphasized enough that even occasional use can be hazardous and, at the wrong time and in the wrong dose and wrong place, even fatal. The short-term effects from occasional heavy use are the most frequent causes of serious harm from substance use among young people. Dependence, though serious, is much less common.



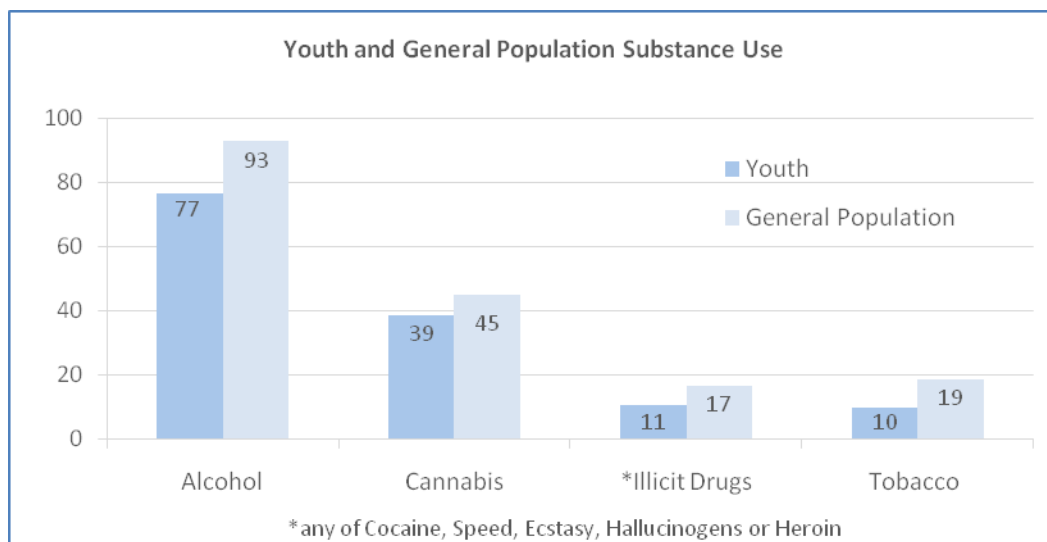
The prevention of substance use-related harm requires the identification and reduction of major patterns of risky substance use and the enhancement of a wide range of protective factors.

Some signs that substance use has become particularly risky or harmful include some or all of the following: early age of onset (especially before age 13 or 14); use to cope with negative mood states; habitual daily use; use before or during school or work; use while driving or during vigorous physical activities; use of more than one substance at the same time; and use becoming a major form of recreation.

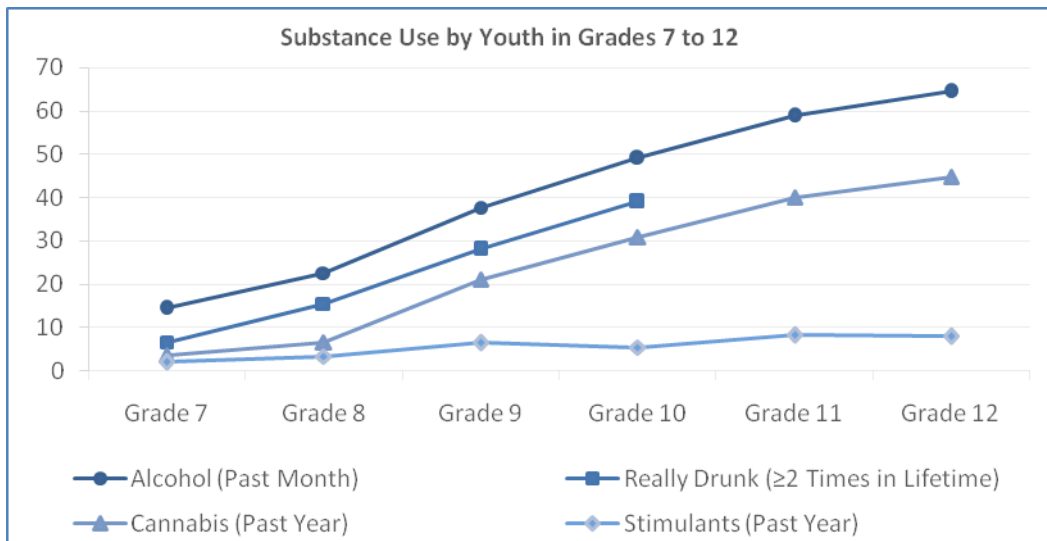
Signs that patterns of use are less likely to be harmful include: taking precautions when using; being careful to use only in small or moderate amounts; less frequent use and only in particular contexts; and being able to stop using at any time.

## SUBSTANCE USE AMONG CANADIAN YOUTH

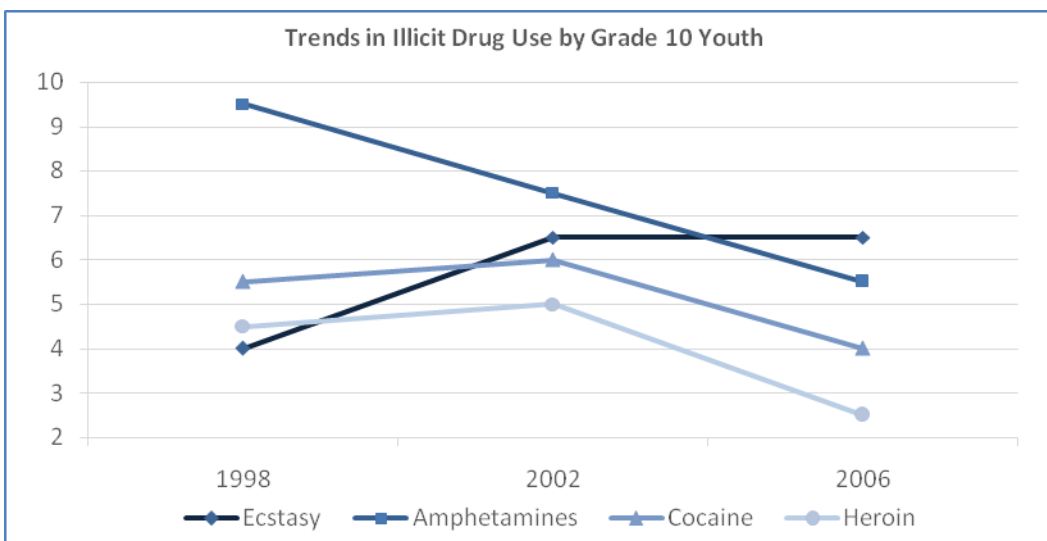
Youth use the same substances as adults though their rates of use are significantly lower. The 2004 Canadian Addiction Survey reports 77 percent of youth aged 15 to 17 years have consumed alcohol at least once in their lifetime. This compares with 93 percent of the general population. Similarly, 39 percent of 15- to 17-year-olds have used cannabis at some point in their life, compared to 45 percent of the general population. Use of other illicit drugs by youth and the general population is much lower. Approximately 11 percent of 15- to 17-year-olds have used other illicit drugs (any one of ecstasy, amphetamines, hallucinogens, cocaine or heroin) at least once in their lifetime (compared to 17 percent of the general population). Tobacco use by Canadian youth is also lower than alcohol consumption or cannabis use and has been in steady decline for several years. The 2007 Canadian Tobacco Use Monitoring Survey reports 10 percent of 15- to 17-year-olds are current smokers, down from 18 percent in 2002. The same survey reports 19 percent of the general population as current smokers.



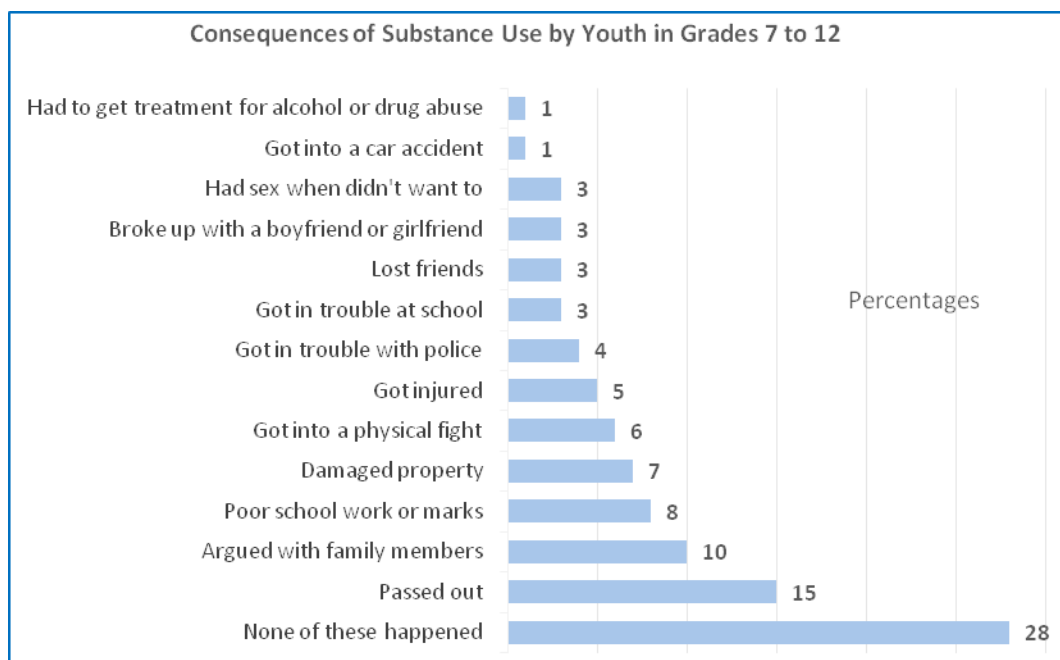
While the rates for substance use are lower for youth than for adults, these rates, particularly for alcohol and cannabis, increase rapidly as young people age. The 2007 Ontario Student Drug Use and Health Survey (OSDUHS) demonstrates this steady rise in the use of alcohol and cannabis by students in grades 7 through 12. Getting drunk also increases as youth get older. The Health Behaviour of School-Aged Children study shows drunkenness rates increase steadily by grade, with approximately 39 percent of grade 10 students reporting being really drunk at least twice in their lifetime. By comparison, use of stimulants increases for students in grades 7 through 11 but declines slightly for those in grade 12.



Overall, national data shows illicit drug use by youth is declining or remaining stable. Results from a recent World Health Organization study, the Health Behaviour of School-Aged Children, demonstrate Canadian youth rates of use of other illicit drugs such as ecstasy, amphetamines, cocaine and heroin are reasonably low and, despite common beliefs, have not increased throughout the past decade. The data also reveals the illicit use of medical drugs, glues and solvents has declined. Nevertheless, even though the national data shows use is declining for these substances, for some jurisdictions there are indications that use is increasing among youth.



When youth are asked about any negative outcomes related to their alcohol or substance use, some types of problems or consequences are reported more frequently than others. For instance, the 2003 Adolescent Health Survey of students in British Columbia found the main consequences reported were passed out (15 percent), arguing with family members (10 percent), and poor school work or marks (8 percent). Only one percent of students reported having to seek treatment for their alcohol or substance abuse or being involved in a car accident. Just over one-quarter of students reported no negative consequences at all.



Regional variations provide another aspect of the overall picture of substance use by Canadian youth. Where available, data tends to show rates and patterns of substance use vary between rural and urban communities and northern and southern jurisdictions. For instance, substance use may be higher in northern and remote communities than in southern urban communities. Communities with the greatest challenges, such as remote or northern areas, are likely to have the least access to services and some other protective factors; a disparity that, not surprisingly, is reflected in the rates of substance use.

Insights into local or school-level substance use rates and patterns can be gleaned using student and/or community surveys, administrative data such as suspension rates and/or other data available at the local level.

## INVESTIGATE

In this section, we investigate the evidence related to:

- risk and protective factors associated with problematic substance use
  - early identification and intervention in the school setting
  - providing a comprehensive continuum of services and supports
  - culturally appropriate services and supports
  - the most important thing schools can do

Universal substance use education programs are important, but the students most prone to develop substance use problems are those least likely to be affected by universal interventions. Universal programs help increase the literacy of successive cohorts of students, ensuring they have the knowledge and skills to make informed choices about substance use and to assist each other in avoiding harm. Universal programs, however, are insufficient to meet the needs of all students. Targeted programs provide extra support by addressing the particular needs of higher risk youth. Targeted programs are designed to supplement the impact of universal programs, not replace them.

The notion that we can target programs to higher risk youth requires two key assumptions: that we can identify appropriate target populations and that we can develop and implement programs that effectively respond to the needs of those populations. In this section, we explore the evidence related to these assumptions. When identifying target populations and developing responses, we must avoid the trend of focussing only on individual factors and mechanisms designed to elicit personal change. This personalization of risk tends to ignore many of the influential environmental factors that result in higher risk.<sup>11</sup> It also diverts attention from many of the most potent interventions that can be implemented in the school setting.

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<sup>11</sup> Benard, B. (2000). From risk to resiliency: What schools can do. *Increasing Prevention Effectiveness*. Ed. W.B. Hansen, S.M. Giles & M. Fearnow-Kenney. Greensboro, NC: Tanglewood Research. Available from [www.tanglewood.net/projects/teachertraining/Book\\_of\\_Readings/Benard.pdf](http://www.tanglewood.net/projects/teachertraining/Book_of_Readings/Benard.pdf).

## RISK AND PROTECTIVE FACTORS FOR IN-SCHOOL YOUTH

Some of the most fruitful research on how to impact educational, social and health outcomes identifies what are called *risk and protective factors*.<sup>12</sup> The focus on risk emerged from health research that examined factors that influence the healthy development of children and adolescents.<sup>13</sup> This research suggested that risk and protective factors could be identified and influenced.

It is possible to identify risk factors that increase the probability of an individual developing problems related to substance use.<sup>14</sup> The table on the next page sets out risk factors that predict early or heavy substance use in youth. Although particular factors can appear at any age or stage of development, they are listed in the table according to when they are most likely to appear in a child's life. Risk factors are cumulative and interact with one another to create risk.

Various protective factors may reduce the impact of risk factors by increasing a person's resilience in adverse circumstances. Measures of caring and connectedness repeatedly show up as protective factors. The strongest protective factors are family nurturance and school connectedness.<sup>15</sup>

The list of risk and protective factors is useful on a number of levels. For example, the information may help identify groups of students who are at higher risk of problems related to substance use *before the onset of problematic use* by assessing both the presence of significant risk factors and the absence of relevant protective factors. An awareness of the diversity of risk factors prevents a narrow focus on the presenting problem and encourages more attention to underlying issues. Additionally, assessment of risk and protective factors can provide information on specific levers available to school staff as they consider how to intervene with students. Of course, not every risk or

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<sup>12</sup> The previous section included a broad discussion of risk and protective factors. Here the discussion will focus on the implications of this literature for targeting programs.

<sup>13</sup> Developmental Research and Programs (1996). *Communities That Care, Prevention Strategies: A Research Guide to What Works*. Seattle, Washington: Developmental Research and Programs Inc.

<sup>14</sup> Hawkins, J., Catalano, R. & Miller, Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112 (1), 64-105; Loxley, W., Toumbourou, J., Stockwell, T., et al. (2004). *The Prevention of Substance Use, Risk and Harm in Australia: A Review of the Evidence*. Canberra, Australia: The National Drug Research Institute and the Centre for Adolescent Health. Available from [http://eprints.lis.curtin.edu.au/archive/mirror/mono\\_prevention.pdf](http://eprints.lis.curtin.edu.au/archive/mirror/mono_prevention.pdf).

<sup>15</sup> Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G. & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use. Mental health and academic outcomes. *Journal of Adolescent Health*, 40, 357.e9-357.e18.

Risk Factors	Protective Factors
Individual	
<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Genetic endowments favouring early childhood conduct disorders or substance use disorders (especially for males)</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Childhood conduct disorders (aggressive behaviour, poor impulse control, etc.)</li> <li>Early regular substance use (<math>\leq</math> age 12 or 13)</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Sensation-seeking or poor impulse control</li> <li>Involvement in crime (e.g., vandalism)</li> <li>Favourable attitudes toward substance use</li> </ul>	<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Easygoing temperament</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Social and emotional competence</li> <li>Shy and cautious temperament</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Religious involvement</li> </ul>
Social (family and peers)	
<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Parental neglect or abuse</li> <li>Single-parent family</li> <li>Substance use problems in family</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Poor attachment to parents</li> <li>Poor parental discipline and expectations</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Parent-adolescent conflict (ongoing)</li> <li>Tolerant parental attitudes toward substance use (especially alcohol)</li> <li>Favourable peer attitudes toward substance use</li> </ul>	<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Positive parental bonding</li> <li>Strong emotional support from parents or other caregivers</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Strong but fair parental supervision</li> <li>Bonding with other adults besides parents</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Parental harmony</li> <li>Strong but fair parental supervision</li> <li>Effective parental communication and negotiation skills</li> <li>Maintaining positive attachment to family</li> <li>Positive bonding with peers who do not use substances</li> </ul>
Environmental (school and community)	
<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Extreme economic deprivation in the community</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Early school failure</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Difficulty transitioning from elementary to secondary school</li> <li>Poor school performance</li> <li>Lack of connection or commitment to school</li> <li>Community disorganization</li> <li>Perceived or actual availability of substances in the community</li> <li>Positive media portrayal of substance use</li> </ul>	<p><b>Prenatal to age 4:</b></p> <ul style="list-style-type: none"> <li>Community support and encouragement of healthy parenting/caregiving</li> </ul> <p><b>Age 5-11:</b></p> <ul style="list-style-type: none"> <li>Positive bonding with school community</li> </ul> <p><b>Age 12-17:</b></p> <ul style="list-style-type: none"> <li>Involvement in sporting or community activities with adults</li> <li>Bonding with teacher or other adults</li> <li>Academic success and achievement</li> <li>Strict and effective controls on availability of substances in the community (especially alcohol, tobacco and cannabis)</li> </ul>

protective factor is amenable to school-based interventions.<sup>16</sup> The list is therefore useful, therefore, in helping school professionals assess what they can and cannot do to assist higher risk students and to identify strategies that directly or indirectly impact students with the greatest risk.

The evidence related to risk and protective factors is useful in identifying populations at increased risk of developing harm. It is not, however, capable of identifying all individual students needing intervention or ensuring that interventions are delivered only to those in need of them.<sup>17</sup> Even though risk factors significantly increase the likelihood of problematic use, the increase for many factors is quite small. Also, many students who do not have significant risk factors nonetheless use substances, at least occasionally, in ways that result in harm. This is particularly true for alcohol.

The identification of risk and protective factors is not meant to generate moralistic judgments of the student or their personal situations. For example, while single-parent families have been identified as a risk factor for problematic substance use, this does not mean that single-parent families are inferior to double-parent families. Rather, it likely indicates that, within the social context of modern society, such families are subjected to increased stressors and need more supports and services.

## EARLY IDENTIFICATION AND INTERVENTION

The evidence reviewed above suggests that attention to risk and protective factors is useful at several levels. Students identified with individual risk factors, for example, those with conduct disorder or early regular substance use might be given supplementary supports in programs designed to increase social and emotional competence. On the other hand, identification of significant social or environmental risk factors might lead to system redesign or the introduction of programs designed to promote appropriate protective factors in the school community.

Studies suggest that school-based early interventions involving school organization and behaviour management have the potential to be cost efficient and effective in reducing harm associated with substance use.<sup>18</sup> Schools are, in fact, essential to any early intervention strategy. Effective intervention requires a whole-school culture that promotes resilience complemented by a range of support services. Implementation of

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<sup>16</sup> Hawkins et al (1992).

<sup>17</sup> Derzon, J. (2007). Using correlational evidence to select youth for prevention programming. *Journal of Primary Prevention*, 28, 421-447.

<sup>18</sup> Drug Policy Expert Committee (2000). *Drugs: Meeting the Challenge: Stage Two Report*. Melbourne, Australia: Drug Policy Expert Committee.

early intervention strategies will be easier if the objectives of the intervention are seen as compatible with the core business of schools and achievable within the resources of the staff responsible for implementation.<sup>19</sup> Attention to outcomes such as fewer disciplinary referrals and more effective classroom management will help achieve staff support.<sup>20</sup>

Even though early identification and intervention is possible and desirable in school settings, the issue of capacity must be addressed. Implementing early intervention requires planning and capacity building which may be incompatible with the reactive crisis management common in dealing with drugs in schools.<sup>21</sup> Implementation studies suggest several keys to success:

- Program design based on coherent program theory and evidence applicable to local context<sup>22</sup>;
- School staff involved in planning strategies and implementation processes that meet local needs<sup>23</sup>;
- Professional development to provide knowledge and skills related to early intervention in school settings<sup>24</sup>; and
- Commitment of resources to support system transition and follow-up<sup>25</sup>.

## COMPREHENSIVE MATRIX OF SERVICES AND SUPPORTS

Given the fact that higher risk youth will present with a variety of risk and protective factors and a range of issues and severity of problems related to substances, it is

<sup>19</sup> Deed, C. (2006). School programs for high-risk students. *Drug Education in Schools: Searching for the Silver Bullet*. Ed. R. Midford & G. Munro. Melbourne, Australia: IP Communications.

<sup>20</sup> McLaughlin, R., McClanahan, K., Holcomb, J., et al. (1993). Reducing substance abuse risk factors among children through a teacher as facilitator program. *Journal of Drug Education*, 23(2), 137-150.

<sup>21</sup> MacDonald, M. & Green, L. (2001). Reconciling concept and context: The dilemma of implementation in school-based health promotion. *Health Education and Behaviour*, 28(6), 749-768.

<sup>22</sup> Springer, J., Sale, E., Hermann, J., et al. (2004). Characteristics of effective substance abuse prevention programs for high-risk youth. *Journal of Primary Prevention*, 25(2), 171-194.

<sup>23</sup> Mitchell, P. (2000). *Primary Prevention and Early Intervention: An Evaluation of the National Youth Suicide Prevention Strategy*. Melbourne, Australia: Australian Institute of Family Studies.

<sup>24</sup> Wyn, J. (2001). *Developing a Framework for Drug Prevention: A Perspective from Youth Research. Proceedings of the Pushing Prevention Seminar Series, Melbourne, July-September 2001*. Melbourne, Australia: Australian Drug Foundation.

<sup>25</sup> Kelly, J. & Sander, K. (2001). *Drug Intervention in the School Community: A Pilot Project. Proceedings of the 2<sup>nd</sup> International Conference on Drugs and Young People, Melbourne, April 4-6, 2001*. Melbourne, Australia: Australian Drug Foundation.

necessary to provide a range of services and supports in order to adequately serve the diverse needs involved. Although the selection of targeted services and supports will vary based on local circumstances, the following provides an example of a matrix of responses that may be appropriate for a school or district to consider.

	<b>UNIVERSAL</b> all students	<b>SELECTED</b> elevated risk	<b>INDICATED</b> risky patterns of use
ENVIRONMENTAL STRATEGIES	Program to promote a caring school culture  Restorative practices promoted throughout school	Targeted skill-building programs for parents and staff	Engagement strategies linked to wide range of group activities  Restorative responses to non-compliance
INDIVIDUAL STRATEGIES	Universal substance use education that increases social and emotional competence  Training in use of restorative practices	Tutoring or peer support  Mentorship program  Targeted skill-building programs for students  Problem-solving-oriented counselling	Psychosocial education for substance-involved youth  Brief interventions for secondary school students with mild to moderate substance use problems  Intensive interventions for students with severe substance use problems or co-morbidities

Universal programs are delivered to all students and are essential for various reasons. From a prevention perspective, these programs are needed because many students who do not have elevated risk may, nonetheless, use substances in ways that could result in considerable harm. From an early intervention perspective, these programs may impact on peer norms and the quality of peer support available to higher-risk youth.

Selected interventions are targeted to those who, based on the presence or absence of risk and protective factors, are at elevated risk for developing future substance use problems. They should begin as early as possible during primary school.<sup>26</sup> They do not focus on substance use per se, but instead employ a comprehensive, strengths-based approach to directly address individual, social and environmental risk factors and build

<sup>26</sup> Toumbourou, J.W., Rowland, B., Jefferies, A., Butler, H. & Bond, L. (2004). *Early Intervention in Schools: Preventing Drug-Related Harm through School Reorganization and Behaviour Management*. Melbourne: Australia Drug Foundation. Available from [www.druginfo.adf.org.au/downloads/Prevention\\_Research\\_Quarterly/PRQ\\_04Nov\\_Early\\_intervention\\_in\\_schools.pdf](http://www.druginfo.adf.org.au/downloads/Prevention_Research_Quarterly/PRQ_04Nov_Early_intervention_in_schools.pdf).

resilience.<sup>27</sup> They should address cognitive, behavioural and affective issues using developmentally appropriate techniques.

Indicated interventions are targeted to those already involved in at-risk or hazardous substance use. Beyond exposure to programming that addresses risk and protective factors, these youth may also require more intensive interventions aimed at behaviour modification to address current problematic substance use patterns.<sup>28</sup> Indicated interventions are normally provided in middle or high school settings where problematic substance use is more common.<sup>29</sup> Interventions should take a restorative rather than punitive approach and seek to create or enhance positive bonds between substance-using youth, other students, teachers and the school culture.<sup>30</sup> Students, both those who use substances and those who do not, should be involved in the design and implementation of programs. The programs need to employ empirically validated methods and modalities to address significant individual, social and environmental risk factors.<sup>31</sup> The goal is to build personal and social resiliency through self-efficacy and the enhancement of individual, social and environmental protective factors.

**STUDENT SKILL-BUILDING PROGRAMS** are designed to transfer basic social and self regulation skills directly to higher-risk youth. A key concept related to student skill building is that of coping deficits. An individual's personal resiliency is directly related to their ability to cope with life stresses. Youth who are lacking healthy coping skills will sometimes turn to substances as a way to deal with depression, anxiety and other forms of negative effects. Topics covered in student skill-building interventions can include: healthy friendship development, self-esteem enhancement, decision making, effective interpersonal communication, stress management, emotional awareness and regulation.

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<sup>27</sup> Toumbourou, J.W., Stockwell, T., Neighbors, C., Marlatt, G.A., Sturge, J. & Rehm, J. (2007). Interventions to reduce harm associated with adolescent substance use: An international review. *Lancet*, 369, 1391-1401.

<sup>28</sup> Gottfredson, D. & Wilson, D. (2003). Characteristics of effective school-based substance abuse prevention. *Prevention Science*, 4, 27-38.

<sup>29</sup> McGrath, Y., Sumnall, H., McVeigh, J. & Bellis, M. (2006). *Drug Use Prevention Among Young People: A Review of Reviews. Evidence Briefing Update*. London: National Institute for Health and Clinical Excellence. Available from: [www.nice.org.uk/niceMedia/docs/drug\\_use\\_prev\\_update\\_v9.pdf](http://www.nice.org.uk/niceMedia/docs/drug_use_prev_update_v9.pdf).

<sup>30</sup> Karp, D. & Breslin, B. (2001). Restorative justice in school communities. *Youth and Society*, 33(2), 249-272.

<sup>31</sup> Midford, R. (2006). Looking to the future: Providing a basis for effective school drug education. *Drug Education in Schools: Searching for the Silver Bullet*. Ed. R. Midford & G. Munro. Melbourne, Australia: IP Communications.

**PARENT AND FAMILY SKILLS TRAINING** seeks to improve parenting and relationship skills in high-risk families since healthy parent-child relationships provide immense amounts of protection against problematic substance use behaviours. Topics covered can include: improving parent-child communication, enhancing conflict resolution skills, setting and maintaining healthy boundaries, and setting and enforcing strong but fair parental expectations. In general, parental skill-building programs work to enhance the significant protective effects derived from healthy parent-child relationships.<sup>32</sup>

**SKILL BUILDING PROGRAMS FOR KEY SCHOOL STAFF** seek to maximize the protective factors related to a child's positive relationships with their school and with adults in the community. In fact, positive student-teacher relationships are probably second only to student-parent relationships in terms of enhancing the prevention of early or problematic substance use in youth.<sup>33</sup> Fortunately, many of the resources developed to enhance the social and emotional competency of parents are easily transferable to skill-building programs for teachers and other staff.

**TARGETED PSYCHOSOCIAL EDUCATION** is normally offered to youth already displaying early or mild substance use problems, and is designed to encourage self-help responses and build healthy supporting relationships with parents, teachers and socially adaptive peers. Topics covered may include: self-assessment, information on substances and the risks associated with their use, skills for safer substance use, tools and techniques for increasing self awareness and self monitoring. Targeted substance use education represents a step up from universal prevention education in terms of intensity and focus, and can be delivered as part of alternatives to suspension programs.

One issue that should be kept in mind when designing and implementing targeted programming for higher risk youth is that the clustering of at-risk youth together can sometimes lead to unintended negative effects. While the research is not clear on the exact processes involved, the concept of deviance training, where youth transfer unhelpful attitudes among one another, has been advanced as one possible explanation for these effects.<sup>34</sup> Strategies for dealing with possible deviance training effects include

1. ensuring that relevant staff are adequately trained in group facilitation methods that promote pro-social bonding and social integration of marginalized youth;

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<sup>32</sup> Kumpfer, K. & Alvarado, R. (2003). Family-strengthening approaches for the prevention of youth problem behaviours. *American Psychologist*, 58(6-7), 457-465.

<sup>33</sup> Bond et al. (2007).

<sup>34</sup> Cho, H., Hallfors, D.D. & Sanchez, V. (2005). Evaluation of a high school peer group intervention for at-risk youth. *Journal of Abnormal Child Psychology*, 33(3), 363-374.

2. avoiding the use of shame and coercion methods that can hamper bonding between counsellors and youth, and exacerbate anti-social attitudes and marginalization; and
3. involving youth who do not use substances problematically in programs to increase healthy bonding across diverse social groups.

**BRIEF INTERVENTIONS** employing cognitive behavioural or other empirically validated treatment modalities can be successfully used with secondary school students experiencing mild to moderate problems with substances.<sup>35</sup> Effective brief therapies may include cognitive-behavioural therapy (CBT) which focuses on methodically building the student's skills to deal with current issues. CBT often includes an assessment of the current situation followed by identification of personalized, usually time-limited, goals and strategies which are then monitored and evaluated over time. Another brief intervention approach involves motivational enhancement therapies (MET) which seek to evoke from a client their own motivations for changing behaviour and to consolidate a personal decision and plan for bringing about that change. MET is especially useful with youth who may not consciously acknowledge the risks associated with their substance use.

**INTENSIVE INTERVENTIONS** may be required for youth who are using substances in hazardous ways and have other complicating psychological conditions such as co-occurring mental health or behavioural disorders. In fact, a high proportion of students who use substances in the most hazardous ways do have co-occurring conditions. If possible, the youth's situation should be assessed carefully by those knowledgeable about concurrent disorders.

### CULTURALLY APPROPRIATE PROGRAMMING

Targeted programs are likely to be more effective for higher risk students from non-majority cultures if they utilize culturally appropriate content. However, using, for example, Aboriginal culture as simply an add on to standard program content is not very effective. The meaningful tailoring of programs for Aboriginal students entails incorporating a deeper understanding of cultural values, practices and symbols into evidence-based approaches such as motivational enhancement therapy or cognitive behavioural therapy. It also means recognizing that Aboriginal students are not a homogeneous population and can vary greatly in particular risk factors and cultural perspectives based on geography and location (e.g., reserve vs. urban), among other things.

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<sup>35</sup> Winters, K. & Leitten, W. (2007). Brief intervention for drug-abusing adolescents in a school setting. *Psychology of Addictive Behaviours*, 21(2) 249-254.

Although relatively little research has been done to validate Aboriginal-specific programs for higher risk youth, the *bi-cultural competence* model appears to provide a good starting point when considering how to go about augmenting protective factors and addressing problematic substance use among Aboriginal youth.<sup>36</sup> This approach aims to equip young people of Aboriginal descent with personal self-management and coping skills to successfully negotiate between mainstream and Aboriginal cultures. In addition to social and emotional skill building, the process of respectful relationship building (i.e., caring and sharing) with teachers, role models and Elders can profoundly influence a young person's sense of belonging to their community, their culture and to society as a whole. Thus, this approach also calls for ongoing trust building and collaboration between schools, public health, Elders and other respected Aboriginal leaders. Similar considerations are needed when addressing other cultural groups.

## THE MOST IMPORTANT THING SCHOOLS CAN DO

As outlined above, schools can incorporate a variety of services and supports into the school setting. These services and supports, if delivered well, have the potential to positively influence the educational and social development of students.

The research on risk and protective factors is clearest on one conclusion; the strongest protective factors are family nurturance and school connectedness. Schools should focus prevention and early intervention efforts on building a culture of caring that fosters attachment to families and peers and develops a sense of belonging at school for each student.<sup>37</sup>

In light of the evidence on the importance of maintaining school connectedness, most of the services and supports available should be delivered in-school. Several schools are now partnering with community agencies to deliver even intensive services within the school setting. It is important to ensure such services are well linked to other services and supports offered by the school.

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<sup>36</sup> Hawkins, E., Cummins, L.H. & Marlatt, G.A. (2004). Preventing substance abuse in American Indian and Alaska native youth: Promising strategies for healthier communities. *Psychological Bulletin*, 130, 304–23.

<sup>37</sup> Bond et al. (2007); Fuller, A., McGraw, K. & Goodyear, M. (2001). *Resilience: The Mind of Youth. Proceedings of the Taking It On Conference, Melbourne, October 25-26, 1999*. Melbourne, Australia: Department of Education, Employment and Training.

## INTERPRET

Emerging from the evidence is a series of good practices:

- Good practice provides early identification by assessing for risk and protective factors that may be impacting educational, social and health outcomes of students;
- Good practice addresses local needs using a comprehensive range of evidence-informed environmental and individual strategies for universal, selected and indicated populations;
- Good practice requires attention to implementation issues such as stakeholder buy-in, training and resources;
- Good practice involves flexibility to respond in culturally appropriate ways to local needs; and
- Good practice focuses on building a sense of belonging at school for every student.

The state of the evidence for addressing substance use in school settings or of meeting the needs of higher risk youth in particular is not such that we can offer a model that can simply be applied in any context. Such a vision of the silver bullet will probably always be illusory. Good practice is more about process than program. Good practice will encourage the development of a school environment that promotes health and learning. It will involve the local stakeholders (e.g., students, teachers, parents) in mechanisms of understanding and responding to local needs with the benefit of global experience.

The following focus questions may help you in interpreting how the good practice guidelines listed above apply in your particular context. The questions are not intended as a formal assessment but as a means of prompting you to reflect on, and engage with, the evidence presented in the earlier section.

## USING RISK AND PROTECTIVE FACTORS FOR EARLY IDENTIFICATION

- How effective is your school at identifying and responding to the needs of students before problems arise?
- How does your school assess the significance of various risk and protective factors in the lives of your students?
- How do policy initiatives at your school reduce risk or increase protection?
- How does your school policy respond to the different risk profiles represented within your student body?
- How do services and supports (programs) offered by your school reduce risk or increase protection?

## A COMPREHENSIVE RANGE OF EVIDENCE-INFORMED STRATEGIES

### MATRIX OF SERVICES AND SUPPORTS

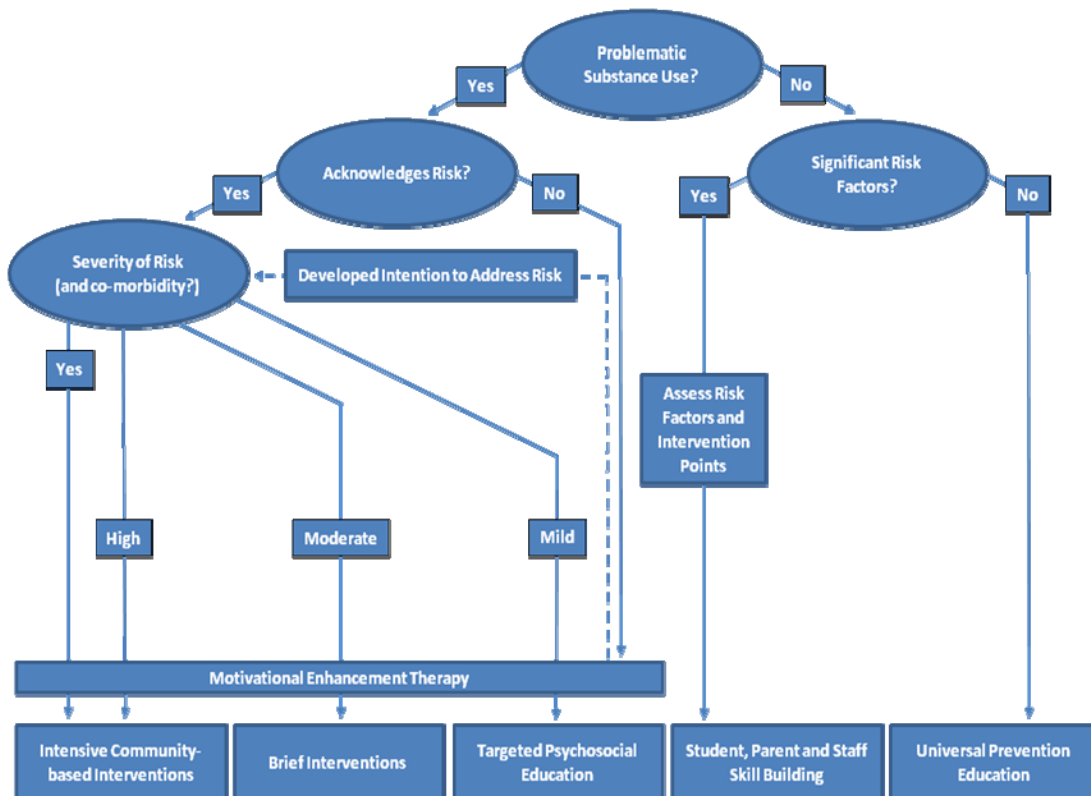
Mapping the services and supports offered by your school to help reduce the risk of harm related to substance use onto the following matrix may allow you to assess the comprehensiveness of your current strategies.

	UNIVERSAL all students	SELECTED elevated risk	INDICATED risky patterns of use
ENVIRONMENTAL STRATEGIES			
INDIVIDUAL STRATEGIES			

- How does your school ensure the services and supports offered continue to respond to the real needs of students?
- How does your school ensure the services and supports reflect available evidence of effectiveness and efficiency?

### MATCHING STUDENTS TO SERVICES

Targeting services and supports requires the ability to determine what level of intervention would benefit the student. This is not an easy task. The following diagram presents a model for assessing and matching higher risk youth to service components within a possible continuum of services. You will need to adapt the model to match the services available in your school.



### ASSESSING THE SEVERITY OF RISK

All psychoactive substance use involves some level of risk but also provides a real or perceived benefit. Providing help in assessing and managing risk is important. The following is a useful tool<sup>38</sup> for identifying those students who may be involved with substances in a risky way.

#### CRAFFT

- ☐ Have you ever ridden in a Car driven by someone (including yourself) who was high or had been using alcohol or drugs?
- ☐ Do you ever use alcohol or drugs to Relax, feel better about yourself, or fit in?
- ☐ Do you ever use alcohol or drugs while you are by yourself Alone?
- ☐ Do you ever Forget things you did while using alcohol or drugs?
- ☐ Do your Family or Friends ever tell you that you should cut down on your drinking or drug use?
- ☐ Have you ever gotten into Trouble while you were using alcohol or drugs?
- \_\_\_ How many times in the past month have you been drunk or high?

A score of more than two on the first six items suggests a need for further assessment. Risk goes up rapidly with the number of times a student reports being drunk or high in the past month. Other key assessment factors include:

#### More likely to be harmful

- Regular use before age 12 or 13
- Use to cope with emotional states
- Daily or habitual use
- Extreme intoxication (e.g., black-outs)
- Use of multiple substances together
- Inability to control use

#### Less likely to be harmful

- Making informed decisions about use
- Taking precautions to minimize risks
- Less frequent use
- Using only small or moderate amounts
- Use only in particular contexts
- Being able to stop at any time

<sup>38</sup> Adapted from Knight, J.R., Sherritt, L., Shrier, L.A., et al. (2002). Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. *Archives of Pediatrics & Adolescents*, 156(6), 607-614.

### ATTENTION TO IMPLEMENTATION ISSUES

- Does your school respond to substance use issues in a
  - ☐ reactive mode when the norm of immediacy demands action?
  - ☐ proactive and planned early intervention mode?
- How does your school ensure all stakeholders are
  - ☐ informed about risk and protective factors?
  - ☐ supportive of school strategies to respond to higher risk students?
- Is adequate training provided to ensure implementation? If not,
  - ☐ What type of training is needed?
  - ☐ Who needs to be offered training?
- Are sufficient resources available
  - ☐ to implement effective early intervention strategies?
  - ☐ to sustain a comprehensive system that responds to all students?

### RESPONDING TO DIVERSITY

- How does your school address issues of diversity?
  - ☐ Cultural, ethnic
  - ☐ Gender
  - ☐ Sexual orientation
  - ☐ Other
- How are risk and protective factors related to the diversity within your school?
- How do strategies to address the needs of higher risk students at your school reflect the cultural and diversity needs of students?

## BUILDING A SENSE OF BELONGING

- Is your school characterized by a culture of caring?
- How would you describe those students who do not regard your school as a place in which they belong?
- In what ways could your school increase connectedness with those students?
- Are there current policies or practices that increase disconnection with those students?
- What alternatives to those policies or practices could be introduced that increase connectedness while addressing the intent of the policy or practice?

## IMAGINE

In this section, we encourage you to imagine what could be. The following examples provide illustrations of how some good practices related to responding to the needs of higher risk youth have been applied in Canadian and international contexts. The list is by no means comprehensive, nor is it implied that all of the evidence referenced in this kit is being applied in any given example cited.

### SACY – SCHOOL-AGED CHILDREN AND YOUTH

*Illustrates a program that:*

- *involves assessing for risk and protective factors*
- *involves a comprehensive range of interventions*
- *attends to implementation issues*
- *focuses on building a sense of belonging*

The SACY project is a school-based prevention and health promotion initiative designed to engage parents, teachers, students, administrators and the wider community in a process to improve secondary-school-based alcohol and drug programs and policies. The program involves four streams:

1. school environment and staff education, including comprehensive, evidence-based drug policy that focuses on preventing, reducing and effectively handling substance use incidents within the school;
2. youth engagement and leadership in which young people are engaged in key elements of project development, including the development of peer-delivered health promotion programs targeted to 12–15 year olds;
3. teacher resource development and training in the use of innovative learning resources; and
4. parent education and engagement through a variety of interactive workshops designed to increase parent awareness and knowledge of substance use issues.

The program has resulted in enhanced connectivity and relationships between parents, youth, school staff and the broader community as well as increased awareness of the issues and where to seek help.

For more information:

[www.city.vancouver.bc.ca/fourpillars/documents/SACYPilotSummaryEvaluationReport.pdf](http://www.city.vancouver.bc.ca/fourpillars/documents/SACYPilotSummaryEvaluationReport.pdf).

## FAST-TRACK

*Illustrates a program that:*

- *involves assessing for risk and protective factors*
- *involves a range of interventions that address both individual and environmental aspects*
- *focuses on building a sense of belonging*

Fast-Track is a multi-component prevention program that aims to promote healthy adjustment by using a school-based intervention beginning in grade 1 and continuing through to grade 10. Ten percent of children were selected into the higher-risk group based on assessment of their risk factors at age 6–7 years. The Fast Track prevention program is based on the hypothesis that improving child competencies, parenting effectiveness, school context and school-home communications will, over time, contribute to preventing antisocial behaviour across the period from early childhood through adolescence.

The elementary school phase of the intervention (grades 1–5) involves a teacher-led classroom curriculum as a universal intervention directed toward the development of emotional concepts, social understanding and self-control, with the following five programs administered to the high-risk intervention subjects:

- parent training groups designed to promote the development of positive family-school relationships and to teach parents behaviour management skills;
- home visits for the purpose of fostering parents' problem-solving skills, self-efficacy, and life management;
- child social skill training groups (called Friendship Groups);
- child tutoring in reading; and
- child friendship enhancement in the classroom (called Peer Pairing).

The adolescent phase of the intervention program (grades 6–10) includes individualized services designed to strengthen protective factors and reduce risk factors in areas of particular need for each youth. Supports include: academic tutoring, mentoring, support for positive peer-group involvement, home visiting and family problem-solving, and liaisons with school and community agencies.

Children in the program demonstrate better emotional and social coping skills, better reading skills and language levels and more positive peer relationships in school. Their parents show better parenting skills and more positive school involvement.

For more information: <http://childandfamilypolicy.duke.edu/fasttrack/index.html>.

## JOURNEYS OF THE CIRCLE PROGRAM

*Illustrates a program that:*

- *responds in culturally appropriate ways to the needs of Aboriginal students*
- *focuses on building a sense of belonging*

The Journeys of the Circle Program was developed by the Addictive Behaviors Research Center at the University of Washington, in cooperation with the Seattle Indian Health Board. The project developed a culturally congruent life skills course entitled Canoe Journey, Life's Journey. Drawing on the Northwest Native tradition of the canoe journey, a metaphor was constructed for life skills essential to bicultural competence. Participants receive an eight-session life skills course which uses aspects of the canoe journey as well as other Native symbols (e.g., the Medicine Wheel) to teach skills such as communication, decision making and goal setting. The course also provides information about alcohol and other drug use and its consequences.

For more information: <http://depts.washington.edu/abrc/journeys.htm>

## PERSONALITY-TAILORED BRIEF INTERVENTION PROGRAM FOR ADOLESCENTS

*Illustrates a research project that:*

- *responds to specific risk factors with tailored interventions*

Recent research from Canada provides validation for an innovative brief intervention for in-school youth tailored to three personality profiles often associated with early or problematic substance use: anxiety sensitive (AS), hopelessness (H) and sensation seeking (SS). This therapy includes psychosocial education on the personality types (including assessments to help youth identify their type), motivational enhancement therapy and cognitive behavioural skill-building components. The therapy consists of two 90-minute sessions.

These brief interventions were shown to significantly improve outcome by facilitating abstinence and reducing drinking quantity, binge drinking rates and alcohol problems in the intervention groups. Beyond just affecting the most risky aspects of early-onset alcohol use, each intervention also appeared to have effects on aspects of drinking behaviour that are particular to each of the personality types.

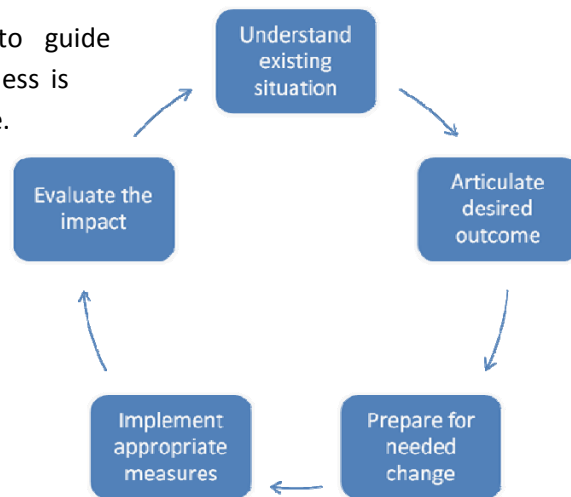
For more information:

<http://alcoholresearchlab.psychology.dal.ca/documents/publications/2005-6/Conrod,%20Stewart,Comeau%20and%20Maclean,%202006.pdf>

## INTEGRATE

The earlier sections of this knowledge kit introduced some of the evidence related to meeting the needs of higher risk youth in ways that promote their performance and development while addressing substance use issues. The last two sections encouraged you to think about how this evidence might relate to your context and illustrated how others have used it in different situations.

Using evidence-based good practice to guide change and achieve increased effectiveness is not as simple as one might hope. Nonetheless, using a simple change management model like the one on the right can increase our chance of success. Change is incremental; therefore, the model is cyclical. One small change creates a new context from which we can attempt further change.



### STEP 1 – UNDERSTAND THE EXISTING SITUATION

One way to assess the existing situation is to prepare a report card on how your school is doing relative to the good practices identified earlier. Ideally, this report card should be prepared using feedback from a variety of stakeholders.

Using Worksheet #1, you can prepare such a report card.

- Collect qualitative information on current strengths and possibilities by having several stakeholders complete the worksheet
- Collate the information into one report
- Discuss the results with stakeholders

### STEPS 2 – ARTICULATE A DESIRED OUTCOME

Based on the report card prepared in Step 1, you can identify priority areas for action. Again, these should represent a shared vision among the key stakeholders.

Record recommended actions in the second column of Worksheet #2. It is not necessary to articulate actions for all areas of good practice at once as this worksheet can be continually updated.

### STEP 3 – PREPARE FOR NEEDED CHANGE

Many activities fail because of insufficient planning. At this point, there are several important questions to ask. Record relevant information in the appropriate columns of Worksheet #2.

- What activities are needed to bring about the recommended action? What training will be needed? How will this be provided? What resources are needed? Are they available? If not, how can you get them? Who might be impacted if the change succeeds? Will they welcome the change? What needs to be done in order to prepare them? What needs to happen to make the change sustainable? How will it get institutionalized? (Column 3)
- Who will be responsible for implementing the change? (Column 4)
- When should the change happen? (Column 5)
- What will be the indicators of progress and success? (Column 6)

### STEP 4 – MAKE IT HAPPEN

Change actually happens one step at a time as you implement your work plan. Some factors are critical to the success of the process.

- Support from appropriate leaders
- Clarity concerning responsibility and accountability
- Good communication to keep all partners informed of progress
- Clear mechanisms for partners to monitor and modify the work plan as needed

### STEP 5 – EVALUATE THE IMPACT

Evaluation is an important part of learning, and also an important part of the change process. This does not need to be overly complicated. Two ways that you can keep track of progress are:

- constantly revisit and revise your work plan (Worksheet #2)
- periodically reassess the situation by collecting feedback from your partners and stakeholders and produce a report card (Worksheet #1)

# WORKSHEET #1—PARTNERSHIP REPORT CARD

Area of Good Practice	Stage	Current Strengths	Possibilities for Improvement
Our school provides early identification by assessing for risk and protective factors that may be impacting educational, social and health outcomes of students			
Our school addresses local needs using a comprehensive range of evidence-informed environmental and individual strategies for universal, selected and indicated populations			
Our school attends to implementation issues such as stakeholder buy-in, training and resources			
Our school demonstrates flexibility by responding in culturally appropriate way to local needs			
Our school focuses on building a sense of belonging at school for every student			
Stage of Implementation:      I=Implemented      P=Partially implemented      N=Not implemented			

## WORKSHEET #2—PARTNERSHIP WORK PLAN

<b>Good Practice</b>	<b>Recommended Actions</b> what needs to be improved	<b>How</b> activities, training, resources, etc.	<b>Who</b> person/team	<b>When</b> complete by	<b>Indicators</b> progress/success
Our school provides early identification by assessing for risk and protective factors that may be impacting educational, social and health outcomes of students					
Our school addresses local needs using a comprehensive range of evidence-informed environmental and individual strategies for universal, selected and indicated populations					
Our school attends to implementation issues such as stakeholder buy-in, training and resources					
Our school demonstrates flexibility by responding in culturally appropriate way to local needs					
Our school focuses on building a sense of belonging at school for every student					

## RECOMMENDED RESOURCES

The following are readily available resources that provide further information or tools of a practical nature. The studies that support the content presented in this knowledge kit are provided in the footnotes throughout the document.

Australian Government (2006). *Keeping In Touch: Working with Alcohol and Other Drug Use. A Resource for Primary and Secondary Schools*. Canberra, Australia: Department of Education, Science and Training. Available at: [www.dest.gov.au/NR/rdonlyres/A1C906F9-1894-46C0-A741-3D7A0741F9C8/12473/KeepingInTouch\\_TheKit.pdf](http://www.dest.gov.au/NR/rdonlyres/A1C906F9-1894-46C0-A741-3D7A0741F9C8/12473/KeepingInTouch_TheKit.pdf)

British Columbia Ministry of Health (2006). *Following the Evidence: Preventing Harms from Substance Use in BC*. Victoria, BC: Ministry of Health. Available from: [www.health.gov.bc.ca/prevent/pdf/followingtheevidence.pdf](http://www.health.gov.bc.ca/prevent/pdf/followingtheevidence.pdf).

Cahill, H., Murphy, B., and Hughes, A. (2005). *A Toolkit of Interventions to Assist Young People to Negotiate Transitional Pathways*. Canberra, Australia: Department of Health and Ageing. Available from: [www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/499247D1160777C0CA2571A20021F1FB/\\$File/toolkit-interventions.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/499247D1160777C0CA2571A20021F1FB/$File/toolkit-interventions.pdf)

Drug Info Clearinghouse (2004). *Early Intervention in Schools: Preventing Drug-Related Harm through School Reorganization and Behaviour Management*. Melbourne, Australia: Australian Drug Foundation. Available from: [www.druginfo.adf.org.au/downloads/Prevention\\_Research\\_Quarterly/RS\\_No11\\_04Nov\\_Early\\_intervention\\_in\\_schools.pdf](http://www.druginfo.adf.org.au/downloads/Prevention_Research_Quarterly/RS_No11_04Nov_Early_intervention_in_schools.pdf).

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