

Review of 100% IN CONTROL



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PREPARED BY



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The members of the review team have contributed to various chapters of this final report according to their specific areas of expertise and interest. The authors are listed below beside their respective contributions.

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1 EXECUTIVE SUMMARY

This Report reviews the Queensland 100% IN CONTROL campaign. The methodology adopted integrates information from several sources, including a systematic literature review, the views of young people and those with some involvement in the campaign and data on patterns of tobacco, alcohol and substance use among Australian young people. The review makes use of existing evaluations of aspects of 100% IN CONTROL and information about similar campaigns in other states and the Commonwealth. The review was not designed to undertake major new research but rather to inform discussions on future directions for the 100% IN CONTROL campaign.

BACKGROUND

100% IN CONTROL is the Queensland Health alcohol, tobacco and other drug prevention campaign directed at young people between the ages of 12 and 17 years. It commenced in 1995.

The goal of the campaign is to delay or prevent the uptake of alcohol, tobacco and other drugs and to minimize associated harms. It has three objectives:

- The reduction of risk factors and enhancement of protective factors associated with alcohol, tobacco and other drug use
- The support of alcohol, tobacco and other drug prevention and education strategies within schools and other settings
- The support of local activities for young people that aim to improve health outcomes associated with alcohol, tobacco and other drug use.

The campaign attempts to achieve these objectives through a multi-strategy approach that includes:

- Sponsorship of the Rock Eisteddfod Challenge and Croc Festivals
- Rumble in the Jungle
- The “Poison” tobacco smoking prevention campaign
- The 100% IN CONTROL website
- Supply of resource materials; and

- Support for local initiatives

It has been funded through a variety of channels. At present these include:

- The National Drug Strategy
- Crime Prevention Queensland
- Public Health Services, Queensland Health

The level and adequacy of funding is unavoidably complicated and determines the current mix of initiatives. Future directions are inextricably linked to negotiations over funding from both Commonwealth and State governments as well as internal priorities of Queensland Health.

The level of impact of 100% IN CONTROL partly depends upon the best available evidence for the right mix of initiatives. Negotiations over future funding should be informed by this growing evidence base, details of which are described in this report.

It will be useful to consider not only evidence from the alcohol, tobacco and other drug prevention field but also the wider evidence from mainstream health prevention and promotion in future planning.

PATTERNS OF ALCOHOL, TOBACCO AND OTHER DRUG USE AMONGST YOUNG QUEENSLANDERS

Patterns of substance use among young Queenslanders are consistent with the rest of Australia.

- Tobacco and alcohol use among young females is increasing compared to earlier cohorts of young women, although young males are more likely to be heavier users of tobacco and alcohol and to report more frequent use of cannabis than females.
- Of those Australian secondary school students that report using illicit drugs, the vast majority report doing so infrequently.
- As would be expected, the prevalence and level of use of all substances increases with age during adolescence.
- Among those that report use, the age of initiation of drug use is decreasing both in Australia and worldwide.

- Friends are the commonest source of tobacco and illicit drugs. Alcohol use is facilitated by both parents and friends.
- Parties, at home or at friends' houses, are the main settings for the consumption of alcohol and/or illicit drugs.
- Indigenous young males and females aged between 13 and 17 are more likely to use substances than non-Indigenous young people of the same age.
- Substance use occurs at an earlier age among young Indigenous males and females than in the non-Indigenous males and females.
- One third of young pregnant women aged 18 to 23 years smoke.
- There is strong evidence that substance use in younger adolescence increases the risk of illness, injury, violence, crime and social alienation.

Protective factors include a mixture of positive family relationships, parent monitoring, positive temperament, intellectual ability, religious/spiritual activities, and low novelty seeking behaviour, avoidance of friendships with delinquent peers, good external support and resilience. Risk factors fall into constitutional factors, environmental factors and adverse life events and are common for a wide range of social health problems.

CURRENT POLICY RESPONSE

The 100% IN CONTROL campaign is consistent with national and state drug policy. The campaign is underpinned by the principle of harm minimisation – though 100% IN CONTROL tends to focus more on two of the three pillars of harm minimisation, namely; demand reduction (prevention and education) and harm reduction (information and some focus on protective factors). These are the central platforms of national and state policies and it seems likely this policy direction will strengthen in the next phase of the National Drug Strategic Framework. Furthermore, young people remain a priority in both national and state policy.

There is a need to build into policy and programs the significance of human development by recognizing the major life stages and transitions. The crucial points in terms of this age group is around the transition to high school to year ten and then the transition to further education, training and work from year eleven onwards into the mid twenties. These subtle additions to the way programs and

campaigns are designed is not yet well addressed in 100% IN CONTROL. The Campaign needs to consider targeting developmental stages in adolescence.

National policy also places increasing emphasis on partnership building. While 100% IN CONTROL does adopt partnership ideas in some aspects this could be considerably strengthened by increasing non-government and business involvement and increasing the emphasis on local ownership.

These additional links may help broaden attention towards the structural determinants of substance use. To the present the Campaign has an emphasis on the individual rather than the environment.

National and state policy also recognizes the special needs and circumstances of Indigenous young people and those from linguistically and culturally diverse backgrounds. Increasing involvement of community, family and community based organisations in the design; implementation and evaluation of aspects of the Campaign may help to address what appear to be some limitations in the current approach.

The adoption of an evidence based approach, something stressed in national policy, does appear to influence the conduct and style of the current Campaign and its elements. Continuous updating is recommended in order to integrate expanding knowledge in the area of good practice in health promotion initiatives targeted at young people.

NATIONAL AND STATE BASED PROGRAM RESPONSES

At the national level the Commonwealth funds mass-media campaigns for tobacco, alcohol and other drugs. The Commonwealth also supports a school based drug education initiative

At present only Queensland, South Australia, Victoria and West Australia run mass media campaigns state-wide directed at young people that are prevention focused

Coordination of campaigns between the Commonwealth and the State is patchy and can detract from the impact of efforts to minimize harm.

National and state based media campaigns have tended to be extensively evaluated in terms of recognition and reach but not necessarily in terms of impact on behaviour over the longer term.

There are several other campaigns, initiatives and programs that could fall under the banner of 100% IN CONTROL but do not do so at present.

There is a need for better collaboration on the ground around prevention activity.

STAKEHOLDER CONSULTATIONS

Consultations with key stakeholders revealed several important issues.

There is a need for greater emphasis on community capacity building through developing network partnerships and linkages with other initiatives and local organisations to maximise the effective implementation of 100% IN CONTROL campaign activities and strategies.

Consideration needs to be given to the development of innovative and creative models of funding that increase flexibility and local ownership of campaign events and resources.

Resources need to be allocated to workforce training in health promotion and drug and alcohol knowledge in order to enable effective utilization of 100% IN CONTROL campaign resources and implementation of campaign activities.

The appropriateness and value of 100% IN Control activities and resources needs to be re-visited according to identified variations within the cohort of 'young people', such as young people from rural and remote locations, and Indigenous young people.

The Campaign needs greater emphasis on activities and materials that target a younger audience than is currently addressed by 100% IN CONTROL and also that engages the more mature young people.

The Campaign needs to accommodate the key role that family and friends play in the substance use behaviour of young people.

BEST PRACTICE

There is limited evidence for the effectiveness of Campaigns. Studies tend to be US based, have limited follow-up and inadequate control methods. A third of published studies found interventions did not result in behaviour change.

Programs with evidence for effectiveness tend to include:

- Family-focused sessions for primary school age children

- Parental involvement in initiatives
- Community-wide and multi-component programs
- Peer led activities
- More intensive initiatives
- Development of personal and social skills (including culturally focused skills)

Components of the 100% IN CONTROL initiatives involve a number of these best practice aspects.

There is some evidence that widening the target group to primary school children with appropriate initiatives that account for developmental stage may produce positive effects into adolescence.

For school based program, effectiveness is enhanced when these include:

- Parental involvement
- Booster sessions
- More intensive initiatives
- Community-wide/multi-component initiatives
- Peer led sessions
- Social skills training
- Motivational decision making

In tobacco use prevention programs there is some evidence of effectiveness when these include:

- Raising the price of tobacco
- Sustained and intensive media campaigns in combination with local and individual behaviour change opportunities and support
- Restriction on workplace smoking
- Primary school initiatives that reduce early risk behaviours

On the other hand there is limited support for:

- Enforcing laws that restrict young people's access to tobacco
- Short term school based programs
- Short term low intensity mass media campaigns that don't have locally integrated programs

ALIGNMENT AND IMPACT OF 100% IN CONTROL

Overall the 100% IN CONTROL initiatives are aligned with the evidence for good principles of program design.

The programs target a wide range of young Queenslanders although they appear under-developed for young people from culturally and linguistically diverse backgrounds.

Activities take place in a range of settings and address multiple levels of intervention, although links between primary and secondary intervention could be considered in the future.

Program components are consistent with the available evidence base.

Comprehensive evaluation and links to Australian based research continues to be a challenge.

POPULATION DIMENSIONS

A broad spectrum of young people have been targeted

Activities appear appealing to both males and females in different ways

Two initiatives seek substantial involvement of Indigenous young people as well as rural and remote localities.

There was potential to support young people already at risk of dropping out of school and non-school attendees although the link to secondary interventions could be strengthened in the future.

Involvement of young people from culturally diverse backgrounds is limited.

CONTEXTUAL DIMENSIONS –

Settings: A wide range of locally familiar settings are employed in the private and public sphere.

Intersectoral collaboration: All initiatives involve some collaboration, although this could be considerably developed especially with young people.

Level of Intervention: Working at a number of levels is a hallmark of 100% IN CONTROL

APPLICATION OF PRINCIPLES OF EFFECTIVE PREVENTION PROGRAMS –

Evidence Base: - Generally well aligned

Framework:

- Programs do address risk and protective factors and evaluations of the Rock Eisteddfod produced some evidence that the events fostered resiliency.
- There is some evidence that the “Poison” campaign achieved saturation.
- There is some concern about the age appropriateness of the Croc Festival and this should be revisited before future events are organized

Accountability:

- There continues to be a challenge to evaluate the outcomes of the programs in terms of factors known to affect risk and protective factors
- Adequate cost benefit analysis has not been undertaken of the program or its individual components.

Involvement of Young People:

- There is potential to substantially increase involvement of young people in the planning, designing, implementing and evaluation of initiatives
- Evaluation of the “Poison” campaign suggests the social context of young peoples’ smoking was underdeveloped
- Overall young people enjoyed the activities and recognized their value

Creative and Effective Processes:

- In general the activities focused on developing life skills
- The “Poison” campaign was knowledge rather than skill focused. It was perceived by young people as objective but not necessarily realistic.
- Health messages were generally well accepted
- Teacher/Leader training appears underdeveloped, especially in the Croc Festival but less so for the Rumble in the Jungle.

FUTURE DIRECTIONS

Six strategic policy options are put forward to inform future directions.

In preparing these policy options several issues were considered.

- Multiple funding sources with different conditions, output expectations and timelines means that 100% IN CONTROL cannot have a clear cut single goal or completion date. Rather, 100% IN CONTROL has developed over time as a ‘brand’ within which several initiatives take place. This is likely to continue.
- Queensland is fortunate in having reasonable surveys of young peoples’ substance use over many years. This means that long term impacts of multifaceted programs like 100% IN CONTROL can be plotted.
- 100% IN CONTROL accords in general terms with national strategic directions and is likely to do so into the future.
- In terms of individual focus, consideration of developmental issues, particularly those at the bottom end of the age range and those at the top end may help to fine tune the prevention messages and processes.
- The Campaign initiatives do broadly comply with the evidence for good practice in media campaigns and programs for young people.
- There is an undervalued leadership role for Queensland Health in promoting evidence based good practice in the prevention of substance use to the community, business and across government. Enhancing this role has the potential to create a better informed professional and public engagement with substance use prevention.

- There will be some benefit in adopting wider concepts and evidence for psycho-social development beyond attempts to address risk and protective factors. In particular, research findings about the significance of resiliency and factors that enable resilient individuals and environments.
- There is a consistent view that young peoples' involvement could be considerably strengthened in the organization of activities across the full spectrum of planning, designing, implementing, managing and evaluating events, activities and products. Fostering young peoples' leadership could be a goal of new initiatives.

STRATEGIC POLICY SCENARIOS

POLICY SCENARIO ONE – MAINTAINING THE STATUS QUO

The current mix of initiatives continues with periodic end point evaluations of specific aspects. Budgets are renegotiated with the Commonwealth, The Department of the Premier and Cabinet and within Queensland Health. Minor modifications are made to update initiatives as evidence strengthens.

Advantages – The evaluation suggests most aspects of the program have bedded down quite well with reasonable local support and a growing expertise at state, regional and local levels.

Potential Risks – At present, 100% IN CONTROL is vulnerable to changing funding agreements and priorities in many of its components. Increasingly, initiatives outside those within 100% IN CONTROL may develop in schools and communities diminishing potential impacts of better aligned resources.

POLICY SCENARIO TWO – GRADUAL CLOSURE OF 100% IN CONTROL

While 100% IN CONTROL has continued good appeal and addresses the principles and goals of the NDSF it could be argued that after seven years there is a need for a fresh approach.

It appears that considerable expertise and knowledge about prevention programs has now been effectively transferred to regions so that corporate support and sponsorship now provides less value for a return of central effort.

Advantages – A well planned corporate withdrawal of tangible support would offset what could become a crisis management approach as funding for various components of the program are not renewed.

Withdrawal of the brand and replacement with a range of well targeted initiatives might address areas of high need in a climate of fiscal restraint.

Potential Risks – Even the best well-planned withdrawal will run into difficulties and will require careful management of the potential public relations and health outcome effects.

A considerable body of expertise and knowledge about drug prevention appears to have developed across the state as a result of 100% IN CONTROL and to fail to foster this would be to reduce the state's capacity to engage with young people and their communities on drug issues that could take as many years to recover. The bases for building partnership approaches, central to NDSF would be undermined.

POLICY SCENARIO THREE – BUILDING A BETTER HEALTH PREVENTION STRATEGY

Greater attention in the design of initiatives to account for differences in developmental issues and psycho-social tasks in early adolescence and late adolescence are added to the existing program. A further addition is the inclusion of strategies that are known to enhance resiliency in the individual.

Advantages – Queensland Health is a leader in evidence based approaches to health and the professional understanding and management systems to support evidence based approaches are well established, unlike other areas of government and the community sector. Queensland Health is likely to be able to effect change in its own organisation more effectively and efficiently. Its public health workforce in the regions has the ability to promote evidenced based approaches and to work with others to effect change.

Potential Risks – The focus on only a health strategy is unlikely to take full advantage of this now accepted wisdom as other sectors have much to offer.

POLICY SCENARIO FOUR – A STRATEGIC GOVERNMENT COMMUNITY BUSINESS PARTNERSHIP

100% IN CONTROL has involved a wide range of organisations and individuals in its festivals and other more local activities. This has the potential to provide a springboard for a more formal arrangement in terms of funding and resourcing activities at local and regional levels.

Strategic and local partners would become a key activity in public health both across government and in communities. Corporate planning and support via partnership grants and training initiatives would become the main focus, along with establishing quality controls perhaps through licensing arrangements for drug prevention events and products.

Advantages – The partnership approach has the potential to generate a much wider funding base and local commitment to substance use prevention.

It ensures government remains a regulator and quality control enforcer to protect the public interest.

Potential Risks – The capability of the public sector to generate partnerships that have a commercial quality, particularly in the human services sector, is quite limited at present. The chance that a rather un-uniform set of programs will eventuate where there is goodwill rather than in areas of highest risk is quite likely to occur.

POLICY SCENARIO FIVE – AN INTEGRATED WHOLE OF GOVERNMENT APPROACH TO DRUG USE PREVENTION

A whole-of-government approach recognizes that prevention of substance use by young people is a matter of concern to a range of portfolios. From the public perspective and that of young people, it makes limited sense to link risk of use solely to one government department primarily concerned with the delivery of health and medical services.

Whole-of-government strategy would make use of branding and the regulatory frameworks and quality controls this requires along with 'joined up' budgets and lines on influence into business and community sectors to produce outcomes in the prevention of substance use. The best available evidence for addressing risk factors, prevention and resiliency, within the context of sound understanding of psycho-social development, cultural relevance and supportive communities, would be applied to the development of a whole of government strategy.

The role of Queensland Health's Public Health Services would be to provide information and guidance on the best approaches to take while other portfolios would provide access to young people in schools, communities and the workplace as well as other functions.

Advantages – This scenario seeks to align the initiative with changing demands for whole-of-government programs and resourcing. It should add value by creating the opportunity to widen the influence of good practice while discouraging limited initiatives with little supporting evidence in both the public and community sectors.

If carefully planned it should align branded initiatives with local initiatives of a much wider kind that can address a variety of needs that are local and culturally specific as well as developmentally appropriate. Under the branding label different strands of social marketing should be possible along with more local activities that conform to best practice.

The incorporation of community engagement approaches, particularly with young people, would encourage commitment and knowledge growth in Queensland's regions.

Potential Risks – Whole-of-government approaches can too easily get stuck in interdepartmental processes and expend resources on process rather than clear achievements in the public domain.

In conclusion, the available information suggests that the 100% IN CONTROL campaign represented an empirically sound approach to substance use within young Queenslanders that was appropriate to the times. Given recent, albeit limited, developments in the evidence base concerning efficacious approaches to the prevention of substance use and its concomitant consequences, in combination with changing patterns of substance use amongst young people, it would seem timely that the future directions of the campaign are re-considered. Further discussions concerning the future directions of the 100% IN CONTROL campaign would benefit from the identification of an appropriate forum for policy debate and development. Such a forum should ideally bring together a range of knowledge and expertise, including input from the private, non-government, government, academic and broader public arenas, with representation from across a range of sectors that are associated with the health and well-being of young people. The provision of a mechanism to allow for the involvement of local community groups, including local government, would also be advantageous. However, in order for such a group to be most effective, it is necessary that it has sufficient profile and credibility to create the appropriate environment for dynamic discussion and action regarding future directions for the 100% IN CONTROL campaign.

2 BACKGROUND

Queensland Health's Alcohol, Tobacco and Other Drugs Service commissioned the Centre for Primary Health Care, in collaboration with Colmar Brunton Social Research, to conduct a review of the 100% IN CONTROL alcohol, tobacco and other drug prevention program for young people in Queensland.

2.1 OVERVIEW OF THE 100% IN CONTROL CAMPAIGN

100% IN CONTROL is Queensland Health's alcohol, tobacco and other drugs prevention campaign for young people aged 12 to 17 years. The 100% IN CONTROL campaign was launched in Queensland in 1995 and has a state-wide reach. 100% IN CONTROL was planned and implemented in accordance with good practice principles of 1995, following developmental work and consultation with young people about strategies and branding for the campaign. The message of the campaign is not about being 100% perfect, but rather encourages young people to enjoy life to the fullest, take control of themselves and their decisions, and to think and behave responsibly about alcohol, tobacco, and other drug issues.

100% IN CONTROL has an overarching goal and three primary objectives. The goal of the campaign is:

- to delay or prevent the uptake of alcohol, tobacco, and other drug use in Queenslanders aged 12 to 17 years, and to minimise the associated harms.

The objectives of the campaign are the:

- reduction of risk factors and enhancement of protective factors associated with alcohol, tobacco, and other drug use among Queensland young people aged 12 to 17 years;
- support of alcohol, tobacco, and other drug prevention and education strategies within school and other appropriate settings; and
- support of local activities for young people that aim to improve health outcomes associated with alcohol, tobacco, and other drug use.

The 100% IN CONTROL campaign is a multi-strategy approach and has included:

Sponsorship of the Rock Eisteddfod Challenge and Croc Festivals – the Rock Eisteddfod Challenge is a secondary school performing arts competition, where

schools perform an original dance/performance piece set to music. In addition to giving young people an opportunity to produce and stage live entertainment, the Rock Eisteddfod Challenge is used as a general education and drug prevention vehicle. The event is dedicated to being a '100% drug free experience' and this is reinforced not only by the ongoing major naming rights sponsorship support of Queensland Health, but by the support strategies which run through the 100% IN CONTROL campaign. 100% IN CONTROL provides tools for School Based Youth Health Nurses and Alcohol, Tobacco, and Other Drug Services workers to conduct alcohol, tobacco, and other drug education activities with participating schools in the lead up to Rock Eisteddfod Challenge events and activities at Rock Eisteddfod Challenge events. 100% IN CONTROL resources are used to support lead up activities at schools and activities at the events. The Croc Festival is for young people in remote communities and the festival involves Indigenous and non-Indigenous young people's performances similar to the Rock Eisteddfod Challenge, as well as sports, arts, crafts, and careers clinics – as a '100% drug free experience'. The Croc Festival differs from the competitive Rock Eisteddfod Challenge as the Croc Festival is about participating, not competition.

Rumble in the Jungle – Rumble in the Jungle is a sport-based alternative alcohol, tobacco, and other drug prevention activity for at-risk young people aged 12 to 17 years. Rumble in the Jungle is made up of pre-event and post-event strategies that may vary from location to location, in addition to the 'Rumble' itself. Rumble in the Jungle is operationalised to include capacity building strategies, with young people involved in various aspects of the planning, decision-making and implementation of the event, team building activities, training activities, and alcohol, tobacco and other drug education, which aim to facilitate the development of protective factors among participants.

The 'Poison' tobacco smoking prevention campaign – the Poison campaign currently includes a cinema commercial, television commercial, community service announcement, pages on the 100% IN CONTROL website and supporting resources such as mouse mats and posters. The key message of Poison is that cigarette smoke is filled with deadly poisonous chemicals, including those found in rat killer, nail polish remover, toilet cleaner, moth balls, lighter fluid, and insecticide. Cigarette smoke is Poison. The Poison campaign has also been recently extended to include the Cigarette Smoke is 'Poison' School Resource, which provides a wide range of strategies and tools that primary and secondary school communities can use to prevent the uptake of tobacco smoking in young people.

100% IN CONTROL website (www.100incontrol.com) – The website was developed and launched in 1999, with some redevelopment in 2000. The website is used to support a variety of 100% IN CONTROL and other school-based activities and initiatives. It includes Party Safe messages for young people, party tips, food and drink ideas, important phone numbers, information on the campaign and its strategies, and games such as the Spin Out competition wheel, and Butt Out which supports young people to quit smoking.

Campaign Resource Materials – A variety of resources have been produced to support the 100% IN CONTROL campaign at a local or state-wide level. This support often takes the form of prizes or giveaways for 100% IN CONTROL activities, games, or competitions with a tent and banners available for these functions. Resources are badged with the 100% IN CONTROL logo and website and provide an educational or practical message or function. Resources currently produced include back packs, bucket hats, pens, brochures and stickers, Polaroid I-Zone instant photos inserted into badged key tags, water bottles, cards, mouse mats, and posters. Two campaign competitions have also been developed – the electronic *100% Trivia Challenge Game Show* and the *SpinOut Wheel*. These are interactive activities that encourage young people to think and learn about alcohol, tobacco and other drug issues. Questions regarding alcohol, tobacco and other drug issues are asked and 100% IN CONTROL prizes are awarded.

Local initiatives – 100% IN CONTROL is used as a vehicle to provide integration and support of various local activities, events and other initiatives. These activities vary between local areas and are tailored to the needs and characteristics of the local community and make use of 100% IN CONTROL campaign resource materials.

2.2 FUNDING ALLOCATION

The 100% IN CONTROL campaign receives funding from multiple sources. The information on the sources of funding and the allocated amounts was provided by Queensland Health and is listed below:

- \$167 000 per annum from the National Drug Strategy (plus an additional \$27 000 per annum in wage savings that are allocated to project funds);
- \$90 000 per annum from Crime Prevention Queensland, Department of the Premier and Cabinet. These funds are allocated to the Croc Eisteddfod

component of the campaign and support the Rumble in the Jungle \$2 500 local community grants; and

- \$140 000 for the 2002-03 financial year from Health Promotion Programs funding. Public Health Services, Queensland Health. These funds are allocated specifically to the Rock Eisteddfod component of the campaign and the specific amount varies annually.

In addition, currently a dedicated full-time corporate office Senior Project Officer position is also funded by Public Health Services, Queensland Health. Wages for this position are separate to the above funds.

As well as these ongoing funds, the 100% IN CONTROL campaign received one-off funding of \$500 000 across 2001-02 and 2002-03. This money was allocated to the development, implementation and evaluation of the “Poison” television commercial. Twelve month sponsorship agreements for the Croc Festival and Rock Eisteddfod Challenge components of the campaign are currently being implemented to maintain continuity of activity until the recommendations of the current Review can be considered and actioned.

The determination of possible future directions for alcohol, tobacco, and other drug prevention programs for young people in Queensland is necessarily and unavoidably complicated by the level and adequacy of funding allocated to these efforts. Efforts aimed at impacting upon licit and illicit drug use will vary in their mix of preventative, early intervention and treatment focus, with this variation reflecting priorities of the time. Nevertheless, it must be remembered that the capacity of preventative efforts to achieve their goals must be considered within the constraints imposed by the level of resources that have been allocated to the task. Furthermore, any consideration of future directions for the 100% IN CONTROL campaign must take into account such constraints.

2.3 THE NATURE OF PUBLIC HEALTH AND HEALTH PROMOTION

A distinguishing feature of the fields of public health and health promotion is the focus on populations, rather than individuals. Public health approaches encompass a spectrum of population-based initiatives to prevent illness and enhance health, including:

- Prevention (or disease prevention), involving action to stop health problems before they start, such as immunisation;

- Health protection, or protecting members of the public from hazards, e.g. food safety or smoking bans;
- Healthy public policy, by drawing attention to the Government's responsibility to develop policies which support health;
- Health education, promoting learning experiences which encourage people to voluntarily act in ways that enhance health; and
- Community empowerment, aiming to enhance the capacity of a community to participate in decision-making and resolve problems which impact on their lives (Holman, 1992).

Health promotion is a relatively recent strand of public health which advocates that the approaches outlined above should not only co-exist, but be integrated in a comprehensive and strategic way to enhance the health of populations (O'Connor-Fleming & Parker, 2001). This model underpins the 100% IN CONTROL campaign. Contemporary health promotion approaches adopt a socio-ecological model, focusing on the social determinants of health and addressing the social structures that impact on health such as living and working conditions (McMurray, 2003; Wilkinson & Marmot, 1998). World Health Organization policy documents that have strongly influenced the direction of health promotion have shifted the attention of health workers from a focus on illness to the promotion of health. The Ottawa Charter, emerging from the first International Conference on Health Promotion in 1986, defines the field in the following way:

Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the object of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being.

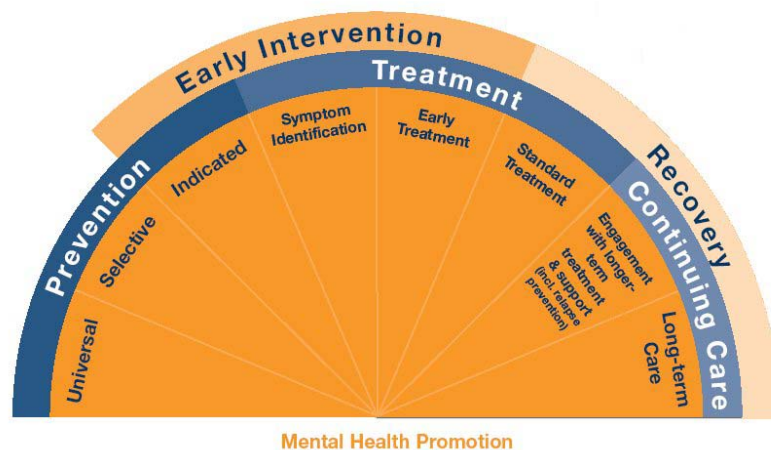
The underlying theoretical basis for health promotion is that the responsibility for health extends well beyond the traditional health system. Health promotion draws on a range of disciplines and bodies of knowledge, for example sociology, psychology, medicine, education, anthropology, urban planning, ecological

science, political science, engineering, marketing and others (Baum, 2002). This emphasis on integrating different types of knowledge requires that health promotion approaches involve collaboration within and between regions and nations, government departments, the private sector and not-for-profit organisations, as well as involving community members in decision-making about issues that affect their lives. These partnership approaches provide the opportunity for health promotion strategies to be implemented across a range of settings, and to enable shared learning about the outcomes from these initiatives (World Health Organization, 1997b).

Initiatives to promote health and prevent illness have the potential to target different sections of the population. One approach to classifying these strategies is the categories of universal, selective or indicated prevention (Australian Health Ministers, 2003; Commonwealth Department of Health and Aged Care, 2000; Gordon, 1987; Mrazek & Haggerty, 1994). Universal prevention interventions target the whole population group or general public. Selective preventive intervention targets the individuals or a subgroup of people who have a higher risk of developing a health problem, based on biological, social or psychological risk factors. Indicated preventive interventions target people who show minimal signs or symptoms of developing a problem.

While these categories refer to the prevention of a health issue(s) such as substance use problems amongst young people, initiatives aimed at preventing health problems can also have the effect of increasing health and well-being across the community. Figure 2.1 illustrates the spectrum of approaches to promoting mental health, although they are also relevant to physical health. These approaches include prevention, early intervention, treatment and continuing care. One of the key concepts underpinning this diagram is that health promotion initiatives can be applied across the spectrum of interventions to enhance overall community well-being.

Figure 2.1: The spectrum of interventions for promoting mental health



(Source:(Australian Health Ministers, 2003) and adapted from (Australian Health Ministers, 2003; Commonwealth Department of Health and Aged Care, 2000; Mrazek & Haggerty, 1994))

The 100% IN CONTROL campaign is largely underpinned by a health promotion framework oriented toward the prevention end of this spectrum. The majority of the campaign initiatives employ universal prevention approaches, although the Rumble In the Jungle activity is more oriented towards the selective and indicated intervention, involving young people at risk of substance use problems.

2.4 TERMS OF REFERENCE

The overall goal of the review of the 100% IN CONTROL campaign is to inform an approach to alcohol, tobacco, and other drug prevention among young people that is based on good practice, evidence, and stakeholder needs (including young people).

In undertaking the work, the Review must:

- Consider the goal, objectives, and target population of 100% IN CONTROL against epidemiological evidence, principles of good practice, and relevant Government policies and strategic frameworks;
- Examine the comprehensiveness of 100% IN CONTROL strategies against principles of good practice and relevant Government policies and strategic frameworks;
- Locate the 100% IN CONTROL in the context of other identified major initiatives for target population from within Queensland Health, other

Government Departments, other states and territories, and relevant community organisations;

- Appraise the goal, objectives, strategy mix, target population, and branding of 100% IN CONTROL against the needs and expectations of key stakeholders (including young people);
- Identify geographic and population (e.g. age, sub-population) gaps in the delivery of 100% IN CONTROL across Queensland in the context of other relevant programs; and
- Develop recommendations for Public Health Services to inform future planning and approach(es) to alcohol, tobacco, and other drug prevention among young people.

The Report is presented in nine (9) chapters. Chapter 1 presented the Executive Summary of the Report, identifying the key issues arising from each component of the review and briefly outlining the possible future directions for the campaign. The current chapter, Chapter 2, sets out the background information underlying the review, while Chapter 3 describes the methodology for the review of the 100% IN CONTROL campaign. Chapter 4 examines recent trends in drug use within the Queensland, Australian and international contexts. The major policy responses at the national and Queensland level are overviewed in Chapter 5, as are other major relevant initiatives that are related to the 100% IN CONTROL campaign. A systematic review of recent literature in the area of health promotion approaches to the prevention of alcohol, tobacco and other drug use by young people is presented in Chapter 6, followed by the findings from consultations with stakeholders in Chapter 7. A meta-analysis of the findings of previous evaluation reports of the 100% IN CONTROL campaign and its individual components is provided in Chapter 8. The final chapter, Chapter 9, outlines possible future directions for the 100% IN CONTROL campaign, identifying the potential risks and benefits associated with the various options.

3. THE 100% IN CONTROL REVIEW METHODOLOGY

This section describes the methodology for the review of the 100% IN CONTROL campaign. The aim of this section is to provide an overview of the core components of the Review and the factors that impacted on undertaking the Review.

3.1 INTRODUCTION

The size, diversity and imprecise nature of health promotion campaigns such as 100% IN CONTROL, present challenges for establishing the relationships between the program and any health outcomes. Due to their multi-faceted nature and the complex environment in which they are implemented, drawing conclusions regarding the impacts of specific campaigns, or even components of campaigns, is extremely difficult. Moreover, the timeframes surrounding such initiatives are rarely congruent with the time required for the consequences of social interventions to be revealed. Additionally, the data on which to base judgements of the efficacy of a program aimed at preventing or reducing the incidence of particular health risk behaviours is usually limited.

These factors, in combination with the post-hoc nature of the 100% IN CONTROL Review and its concomitant time and financial limitations, necessitated the use of a methodology that recognised the need to integrate information from a number of sources and bring together literature and data that was already available in the public domain. The review consultancy was not designed to undertake major new research but rather to collate and critically appraise existing information and propose potential future directions for efforts in this area, taking into consideration the needs and views of key stakeholders. Consequently, the review incorporates several methods in order to address each of the Review's objectives.

A series of key dimensions to inform good practice in the prevention of substance use problems amongst young people was developed as a framework to guide the various components of the review. These dimensions were compiled from a number of documents, including:

- Preventing Substance Use Problems Among Young People: A Compendium of Best Practices (Canadian Centre on Substance Abuse, 2001).

- National Drug Strategic Framework 1998-99 to 2002-03: Building Partnerships (Ministerial Council on Drug Strategy, 1998)
- Pathways to Prevention: Developmental and Early Intervention Approaches to Crime in Australia (National Crime Prevention, 1999)
- Structural Determinants of Youth Drug Use (National Drug and Alcohol Research Centre, 2001)
- Beyond a Quick Fix: Queensland Drug Strategic Framework 1999/2000 to 2003/2004 (Queensland Government, 1999a)
- Integrating Public Health Practices: A Position Statement on Community Capacity Development and the Social Determinants of Health for Public Health Services (Queensland Health, 2003)
- Queensland Drug Summit-Focus on Youth: The Report (Queensland Government, 1999b)
- The Ottawa Charter for Health Promotion (World Health Organisation, 1986).
- The Jakarta Declaration on Leading Health Promotion into the 21st Century (Organisation, 1997; World Health Organization, 1997b)

The *Compendium of Best Practices* produced by the Canadian Centre on Substance Abuse (2001), was used as a foundation for developing the dimensions to inform good practice. This publication was chosen due to its specific focus on best practice principles in preventing substance use problems amongst young people. Further, the recommendations for good practice within the other documents are aligned with the Compendium's principles. For example, the components of health promotion identified in the *Ottawa Charter* (1986) are consistent with the Compendium's principle of 'Build a Strong Framework' and 'Create an Effective Process' (i.e., Ottawa Charter principles of 'Build Healthy Public Policy', 'Create Supportive Environments', 'Strengthen Community Action' and 'Reorient Health Services' is aligned with the Compendium's principle 'Build a Strong Framework'; and the Ottawa Charter principle of 'Develop Personal Skills' fits with the Compendium's principle 'Create an Effective Process'). Similarly, the National Crime Prevention's (1999) recommendations have a strong emphasis on risk and protective factors in crime prevention, and these fit well into the Compendium's principle 'Build a Strong Framework'.

To ensure the dimensions of good practice were sufficiently oriented towards the Australian context, further principles beyond those identified in the Compendium were included. These reflected both the priority groups in the Queensland population of young people, and the structural determinants of drug use amongst young people. These 'population' and 'contextual' dimensions were particularly informed by the Australian policy documents listed above. The principle 'sound evidence base' was included as a separate sub-dimension to ensure that this knowledge was adequately integrated into the review process, following the analysis of the current evidence which formed a key component of this review (see Chapter 6). The key dimensions to inform good practice in the prevention of substance use amongst young people were as follows:

Population dimensions:

- Targeted at developmentally appropriate age periods, in order to capture critical periods and transitions along developmental pathways;
- Appropriately balanced to take into account gender differences in patterns of use and abuse in relation to specific substances, i.e. tobacco, alcohol and illicit substances; and
- Structured to address the differing needs of particular population groups, notably, Indigenous people, rural, regional and remote populations, culturally and linguistically diverse populations and young people outside mainstream education and employment settings.

Contextual dimensions:

- Consideration of range, variety and appropriateness of settings addressed in relation to needs of young people;
- Extent to which intersectoral collaboration and community partnerships was emphasised and achieved;
- Degree of correspondence between intervention focus and level at which change is expected.

Principles of effective practice in the prevention of substance use problems in young people:

- Existence of sound evidence base for initiative;

- Development of strong framework to underpin initiative (e.g. protective factors, risk factors, resiliency, comprehensiveness, program duration and intensity);
- Clear accountability structures and processes in place (e.g. accurate information, clear and realistic goals, monitoring and evaluation, program sustainability);
- Evidence of understanding and involvement of young people in initiative(e.g. developmental relevance, young people’s perceptions, involvement in program design and implementation); and
- Effective process (e.g. credible messages, knowledge and skill development, interactive group processes, leader training and qualities).

3.2 COMPONENTS OF THE REVIEW

The review of the 100% IN CONTROL campaign involved several distinct elements:

Review Activity	Brief Description	Data Sources	Purpose
Review the policy context	Analysis of relevant state and national policies	Relevant state and national policy documents	Establish the critical policy elements that need to be considered for integration into future health promotion directions
Literature review	Review of literature on health promotion approaches for alcohol, tobacco and drug use in young people	Australian and international published literature	Identify efficacious approaches and good practice principles
Appraisal of previous evaluation information	Appraisal of previous evaluation reports	Evaluation reports on both the campaign overall and various individual strategies	Consider the progress of the campaign against the stated goal and objectives
Stakeholder consultations	Semi-structured one-to-one or focus group interviews with large number of stakeholders	List of stakeholders identified in conjunction with Queensland Health	Identify stakeholder perspectives
Review of other relevant initiatives	Review of relevant documents	Relevant state and national initiative documents	Locate 100% IN CONTROL in the context of other identified major initiatives for target population
Application of evidence	Mapping of evidence against 100% IN CONTROL strategy	Information from previous review activities	Development of recommendations for future directions

More specific details of the methods for each Review activity are provided in the relevant sections of the Report. The conclusions of the review of the 100% IN CONTROL campaign are based on a synthesis and analysis of the information gathered from all core elements.

4. TOBACCO, ALCOHOL AND ILLICIT DRUGS USE AMONGST YOUNG QUEENSLANDERS

Alcohol, tobacco and illicit drug use and abuse continue to be major problems for governments at all levels. The level of health-related harm caused by socially accepted and regulated drugs, such as alcohol and tobacco, far outweighs that caused by illicit drug use and abuse. It is fundamental that decisions regarding policy responses to tobacco, alcohol and illicit drug use are based on good knowledge of patterns and structure of use.

This section examines recent trends in the use of tobacco, alcohol and illicit drugs amongst young people, within Queensland, national and international contexts. The information is drawn mainly from reports published by Queensland Health, the University of Queensland, the Commonwealth Department of Health and Ageing, the Australian Institute of Health and Welfare (AIHW), the Australian Bureau of Statistics (ABS), the World Health Organization (WHO), the United Nations, and some national health and substance use surveys from Australia and other developed countries.

Several limitations of data sources must be acknowledged. Firstly, assessing the prevalence of substance use, especially illicit drugs, among young people is a complex matter. According to the WHO (World Health Organization, 1997a), data on the levels and patterns of illicit drugs are less widely available than on the use of alcohol and tobacco. The prevalence of use of these drugs may be underestimated due to their illegality. Users of these drugs are likely to be under-represented in household surveys or may be reluctant to participate if contacted. Besides, those who agree to participate may be less prone to provide accurate responses. Secondly, there is little uniformity across countries in terms of the methods of data collection, the range of ages being surveyed, the definition of categories and timeframes of consumption, the analyses undertaken, and the periods when surveys were carried out (Jernigan, 2001; World Health Organization, 1997a, 1999). Several surveys have sampled only young people who attend school (Grunbaum et al., 2002; Stanton, Carmont, Ballard, & Lowe, 2000) or university (Roche & Watt, 1999) and therefore are not representative of all young people (especially those at higher risk of drug use). Attempts have been made to use standardised methodological approaches, especially in alcohol (Setttertobulte, Jensen, & Hurrelmann, 2001) and tobacco use (Warren et al.,

2000). Thirdly, cultural, political and legal differences make it difficult to compare substance use across countries. The above limitations should be considered when making interpretations of the data.

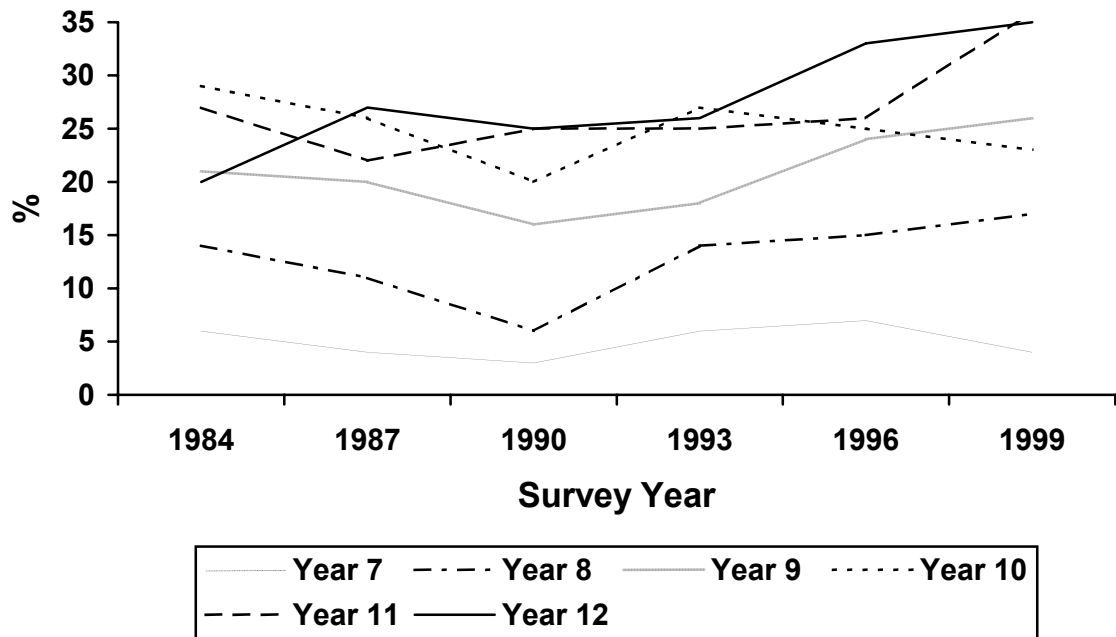
4.1 TRENDS IN QUEENSLAND WITHIN THE AUSTRALIAN AND INTERNATIONAL CONTEXTS

4.1.1 TRENDS IN TOBACCO USE

Queensland

Since 1984, the Secondary School Alcohol and Smoking Survey (SSASS) has been conducted and repeated every three years to examine the smoking and drinking behaviours of Australian secondary school students (Years 7 to 12; 12 to 17 year-old students). The Queensland component of the 1987 and 1990 surveys showed that the proportion of students smoking cigarettes in the previous week decreased from 1984 (Ballard, White, & Hill, 1992). However, as shown in Figure 4.1, the prevalence of smoking increased again for all year levels between 1990 and 1999 (Stanton et al., 2000).

FIGURE 4.1: Percentage of students who reported smoking in the last week in Queensland



Source: (Stanton et al., 2000)

Australia

According to the SSASS, smoking prevalence (having smoked in the week before the survey) among Australian secondary school children decreased between 1984 and 1990, increased slightly in 1993, and has remained relatively constant (around 20%) since then (McDermott, Russel, & Dobson, 2002). The proportion of smokers was consistently higher among girls than boys, except in 1999 when the prevalence rates were similar.

Data obtained from the 1995 and 1998 National Drug Strategy Household Surveys (NDS) and reported by the Australian Institute of Health and Welfare (AIHW) (Moon, Meyer, & Grau, 1999) showed that there was a decrease in the proportion of people aged 14 to 19 years who had never smoked (51.4% in 1995 to 46.5% in 1998) with a corresponding increase in the prevalence of regular (i.e. smokes daily/most days) and occasional (i.e. smokes less often than daily/most days) smoking. In the 20 to 24 years age group, the proportion of regular smokers decreased (from 36.9% to 31.2%) but the number of occasional smokers rose (from 6.2% to 7.9%).

Worldwide

According to the WHO, smoking has been in decline among men in the high-income countries since the 1990s but the proportion of teenagers and women who smoke has grown over the last decade (Bell et al., 1999), especially in countries like China, India, Egypt and Thailand. There is also evidence that children are starting to smoke at younger ages. It is estimated that about 20% of smokers worldwide began before the age of 10 (United Nations, 2003). Eight out of ten people in the high-income countries start to smoke in their teens. Available data from the low and middle-income countries show that most smokers start by their early twenties. However, the trend for high, middle and low-income countries is toward younger ages (Bell et al., 1999).

In the United States, smoking rates among teenagers rose during the 1990s but have recently stabilised, 'with some decline in the levels of daily and last 30 days' use for 10th and 12th graders' (Gilvarry, 2000 p. 57). However, about 65% of students in Years 9 to 12 had ever smoked (i.e. lifetime cigarette use) and almost 15% had smoked on at least 20 of the 30 days preceding the survey (i.e. current frequent cigarette use) (Grunbaum et al., 2002). Prevalence estimates for older students (Years 11 and 12) are almost 10% higher than for the general US population (Johnson et al., 2002). Smoking prevalence among young people in

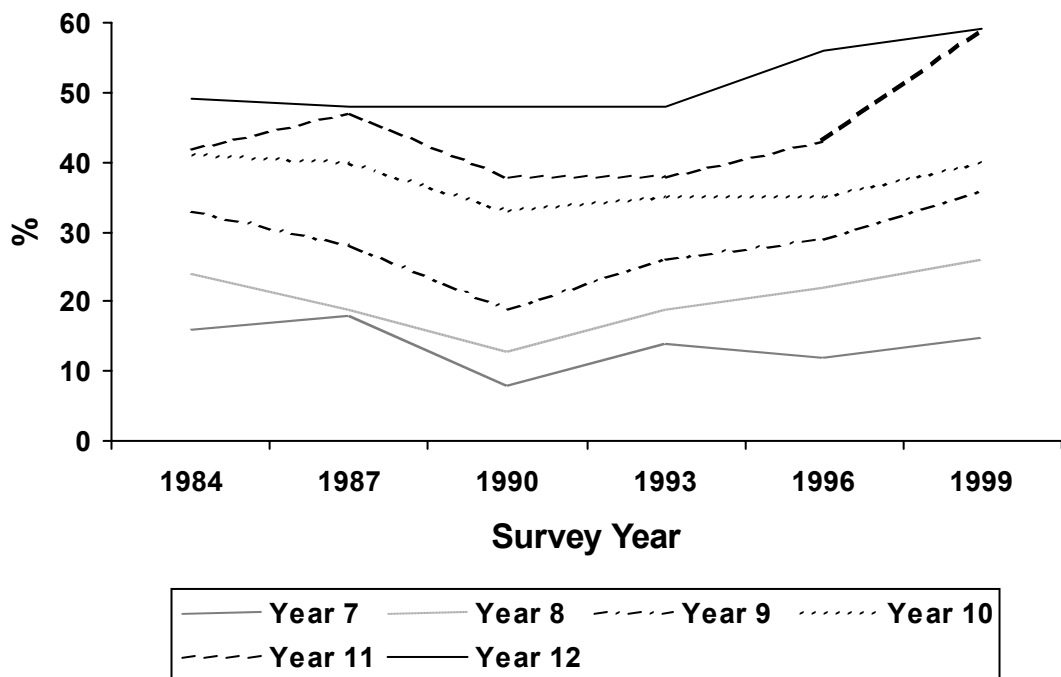
Europe has been found to be higher than in the US Compared with the Year 10 US students, European students were more likely to have smoked in the last 30 days (37% % vs. 26%) (The global youth network, 2003).

4.1.2 TRENDS IN ALCOHOL USE

Queensland

Trends in last week alcohol use among Year 7 to 12 students in Queensland from 1984 to 1999 are shown in Figure 4.2 (Stanton et al., 2000). The results from 1987 and 1990 SSASS showed a decrease in the prevalence of alcohol use since 1984 (Ballard et al., 1992). The 1993 survey reported an increase in the proportion of students drinking alcohol compared with 1990 (Stanton, Gillespie, Baade, Ballard, & Lowe, 1994) but the overall prevalence was still lower than 1984. Since 1993, alcohol consumption has increased slightly for students in all year levels except Year 7.

FIGURE 4.2: Percentage of students who reported drinking alcohol in the last week in Queensland



Source: (Stanton et al., 2000)

Australia

The 1995 and 1998 National Drug Strategy Household Surveys (Moon et al., 1999) showed that the proportion of males aged 14 to 24 years who had never

consumed a full glass of alcohol increased from 8.6% to 13.4%, while the proportion of females remained stable (about 16%). For males, the prevalence of occasional alcohol use (less than weekly) increased from 28.2% in 1995 to 31.2% in 1998 but the regular use (at least weekly) decreased (from 55.1% to 48.7%). For females both the occasional and the regular use increased (from 40.3% to 44.1% and from 33.3% to 34.1% respectively).

As part of the evaluation of the National Alcohol Campaign, four national surveys (from Feb 2000 to Feb 2002) were conducted among Australian teenagers aged 15 to 17 years. The results showed that the proportion of people who had consumed at least ten alcoholic drinks in their lives remained relatively stable at approximately 55% of males and females, increasing with age. However, the proportion of 16-year-old female drinkers increased over time (King, Ball, & Carroll, 2003). In terms of the recency of consumption, the results were similar across the surveys: approximately 75% had consumed alcohol within the last 12 months; about 65% in the last three months; 30% over the last two weeks; and about 25% within the last week.

Worldwide

According to the WHO (Jernigan, 2001), there is evidence of a convergence in drinking patterns among young people worldwide, especially due to the increasing marketing among teenagers of inexpensive new products, such as alcopops, alcoholic 'energy' drinks, pre-mixed cocktails, and so on. Children are also starting to drink at an earlier age, which has shown to increase the risk of alcohol-related injury and alcohol dependence later in life. Overall, boys are more likely to drink and to drink heavily than girls (except in several European countries where the prevalence of alcohol use among young females has risen to or surpassed that among young males). Available data from some low and middle-income countries (i.e. Brazil, Chile and Mexico) show an increase in drinking levels, especially among young women (Jernigan, 2001).

In the US the prevalence of alcohol consumption amongst young people increased during the 1990s and has declined or stabilised in recent years (Gilvarry, 2000). In a recent US survey (Grunbaum et al., 2002), 78% of Year 9 to 10 school students had used alcohol in their lifetime and nearly 50% had had 1 or more drinks of alcohol on 1 or more of the 30 days preceding the survey (i.e. current alcohol use). Episodic heavy drinking (5 or more drinks of alcohol on 1 or more occasions during the 30 days preceding the survey) was reported by 30% of students. A comparison between the 1994 and 1998 Health Behaviour in

School-aged Children (HBSC) surveys carried out in 28 European countries suggests that the regular use of alcohol among adolescents in west European countries is declining, while increasing in Eastern Europe. However, the frequency of episodes of drunkenness among young people in general is increasing (Settertobulte et al., 2001). A comparison between Year 10 US and Europe students showed that Europeans were more likely to have consumed alcohol in the last 30 days (61% vs 40%) (The global youth network, 2003).

4.1.3 TRENDS IN ILLICIT DRUGS USE

Queensland

Prior to 1996, the SSASS did not include questions on illicit drugs. The Queensland component of the 1996 and 1999 surveys, now titled the Australian Secondary School Alcohol and Drug Survey (ASSADS) found similar results regarding illicit drugs for each of the nine groups of substances investigated (i.e. sleeping tablets / tranquillisers / sedatives other than for medical reasons; marijuana; steroids without a doctor's prescription; amphetamines other than for medical reasons; ecstasy/XTC; cocaine/crack; heroin/opiates/narcotics other than for medical reasons; hallucinogens; sniffing and/or inhaling intoxicants to get high). The level of reported use over the last 12 months ranged from about 30% (marijuana) to about 2-3% (steroids, ecstasy, heroin, cocaine) (Stanton et al., 2000). Trends (from 1996 to 1999) indicate: a small increase in the proportion of students who have ever used tranquillisers; a decrease in marijuana use in the lower levels (Years 7 to 10) and an increase in use in senior levels (Years 11 and 12); a general increase in sniffing, amphetamine and LSD use.

Australia

Data from the 1995 and 1998 NDS surveys showed an overall increase in the recent use (previous 12 months) of illicit drugs among young people aged 14 to 24 years (Moon et al., 1999) (see Table 4.1).

TABLE 4.1: Recent (a) illicit drug use by young people aged 14-24 years, 1995 and 1998

Drug	Recent use (%)	
	1995	1998
Marijuana/cannabis	32.8	37.9
Pain killers/analgesics(b)	3.8	7.3
Tranquillisers/sleeping pills(b)	1.5	4.1
Steroids(b)	Nr	0.4
Barbiturates(b)	0.1	0.5
Inhalants	1.4	2.3
Heroin	0.6	1.3
Amphetamines	5.6	9.8
Cocaine	1.8	1.9
Naturally occurring hallucinogens	1.6	Nr
LSD/synthetic hallucinogens	6.3	Nr
Hallucinogens	Nr	9.6
Ecstasy	2.0	6.5

(a) Used in the last 12 months

(b) For non-medical purposes

Nr = Not reported

Source: National Drug Strategy Household Surveys 1995, 1998 (Moon et al., 1999)

In contrast to the NDS data, the two Australian School Students Alcohol and Drugs Surveys (ASSADS) reported a decline between 1996 and 1999 in the proportion of school students (Years 7 to 12; 12 to 17 year olds) who had used any illicit substance (White, 2001). In each survey, over 25,000 students across Australia were asked about their use of illicit substances in their lifetime, in the last month or in the last week. The results suggest that:

- The proportion of boys and girls (both younger and older) using cannabis (either lifetime use, previous month or in the last week) decreased between 1996 and 1999.
- There has been little change in the prevalence of analgesic use between 1996 and 1999.
- Fewer students aged between 12 and 15 years had used a tranquilliser in their lifetime or in the previous month in 1999 than in 1996. Little change was observed among senior students (16 to 17 year olds).

- The proportion of younger students (12 to 15 year olds) who had used steroids in their lifetime increased but the recent use decreased. There was no change in the proportion of older students.
- There was no change in the proportion of students using inhalants.
- There was no change in the proportion of 12 to 15 year olds who had used opiates between 1996 and 1999. There was a slight increase (not significant) in the proportion of older students.
- More students (both younger and older) had used amphetamines in 1999 than in 1996.
- There was no change in the proportion of students reporting to have used cocaine.
- The proportion of students (both younger and older) using hallucinogens (lifetime use or previous month) decreased.
- There was no change in the proportion of younger students (12 to 15 year olds) reporting to have used ecstasy in their lifetime or in the previous week. On the other hand, the proportion of 16 to 17 year olds who had used ecstasy in the previous month increased between 1996 and 1999.

Differences in sampling and methodology may explain the dissimilar results between the NDS and the ASSADS. The NDS data showed that the proportion of young people aged 20 to 24 years who reported recent use of marijuana, amphetamines and hallucinogens was higher than the proportion aged 14 to 19 years (Moon et al., 1999). This group (20 to 24 year olds) was not sampled in the ASSADS. In addition, the time frame used to explore illegal substance use differed between surveys. The NDS results focused on lifetime and last year use of substances; the ASSADS asked participants about their use of substances in their lifetime, last month or in the last week. In general, school surveys promote anonymity and are therefore more likely to produce more reliable answers and consequently higher prevalence of substance use than household surveys (United Nations, 1999).

Worldwide

For many countries the reporting of trends in drug abuse is influenced by the authorities' perceptions of the development of the drug problem (i.e. police

reports on seizures and on crime, reports from social workers, reports from drug treatment centres, political agendas, and so on). These factors may cause bias towards either an increase or a decline in the prevalence of drug use.

Nevertheless, according to the United Nations Office for Drug Control and Crime Prevention (UN ODCCP) (United Nations Office for Drug Control and Crime Prevention, 2002), trend data provides valuable insights into the patterns of illegal substance abuse. Results from the year 2000 show an overall increase in drug use worldwide, mainly related to cannabis and the amphetamine-type stimulants (United Nations Office for Drug Control and Crime Prevention, 2002). In most countries, the highest levels of drug use are reported among those aged 18-25 years.

In the US the proportion of Year 9 to 12 students who reported lifetime and current marijuana use increased significantly from 1991 to 1997 (31% to 47% lifetime use; 15% to 26% current use) and then decreased from 1997 to 2001 (47% to 42% lifetime use; 26% to 24% current use) (Grunbaum et al., 2002). Lifetime and current cocaine use increased significantly from 6% and 2% respectively in 1991 to 9% and 4% in 2001. School surveys data show that the lifetime use of illicit drugs is highest in the US and Australia (greater than 40%), high in Canada (more than 35%), and lower in Europe (about 18%). However, the increase of drug use in Europe from 13% in 1995 to 18% in 1999 is a matter of concern (United Nations Office for Drug Control and Crime Prevention (UN ODCCP), 2002).

4.2 CURRENT PATTERNS OF SUBSTANCE USE IN QUEENSLAND

Two main data sources exploring the prevalence and patterns of substance abuse in Queensland are available: (1) the Queensland component of the 1999 ASSADS (Stanton et al., 2000), which surveyed school students from Years 7 to 12 (12 to 17 year olds); and (2) the Queensland Young People's Mental Health Survey (QYPMHS) (Donald, Dower, Lucke, & Raphael, 2000), which collected data from a representative sample of the Queensland population in the age group 15 to 24 years.

4.2.1 GENERAL PREVALENCE

Overall prevalence of tobacco, alcohol and illicit drug use among young people in Queensland and Australia is shown in Table 4.2.

TABLE 4.2: Overall prevalence of substance use among young people in Queensland and in Australia

Type of substance	Prevalence (%)		
	Queensland		Australia
	1999 ASSADS(a)	2000 QYPMHS(b)	2001 NDS(c)
Tobacco	41% had smoked within the last 12 months 24% had smoked within the last 7 days	26% smoked at least one cigarette per day	11% smoked daily
Alcohol	90% had consumed alcohol (lifetime use) 39% had consumed alcohol within the last 7 days	74% drank alcohol at least weekly 28% drank alcohol at least weekly	67% had consumed within the last year
<i>Illicit drugs</i>			
Marijuana	33% had ever used 9% had used within the last 7 days	51% had ever used	28% had ever used
Inhalants	28% had ever used 5% had used within the last 7 days	3% had ever used	2% had ever used
Tranquillisers / sedatives	21% had ever used 2% had used within the last 7 days	5% had ever used	2% had ever used
Hallucinogens	8% had ever used LSD 1% had used LSD within the last 7 days	13% had ever used hallucinogens	2% had ever used
Amphetamines	7% had ever used 1% had used within the last 7 days	9% had ever used	5% had ever used
Heroin	5% had ever used 1% had used within the last 7 days	2% had ever used	—
Cocaine	4% had ever used 1% had used within the last 7 days	2% had ever used	1% had ever used
Ecstasy	3% had ever used 1% had used within the last 7 days	3% had ever used	4% had ever used

(a) 1999 Australian School Students' Alcohol and Drugs Survey (ASSADS): Year 7 to 12 school students (Stanton et al., 2000)

(b) 2000 Queensland Young People's Mental Health Survey (QYPMHS): representative sample of 15 to 24-year-old Queenslanders (Donald et al., 2000)

(c) 2001 National Drug Strategy Household Survey (NDS): representative sample of 14 to 17-year-old Australians (Australian Institute of Health and Welfare (AIHW), 2003)

Differences in sampling and methodology need to be considered when comparing data sources. Except for marijuana, hallucinogens and amphetamines, lifetime use of substances was higher among Queensland school students' compared with the QYPMHS sample.

4.2.2 AGE AT FIRST USE

No data is available in relation to the age at first use of substances among young Queenslanders. However, at the national level 60% of current smokers and ex-smokers reported starting cigarette use between the ages of 15 and 19 years, and 16% started before 15 years of age (McDermott et al., 2002). The age of initiation of illicit drug use has been decreasing from older to younger age cohorts (Degenhardt, Lynskey, & Hall, 2000). According to the NDS surveys (Darke, Ross, Hando, Hall, & Degenhardt, 2000) the median age at which cannabis was first tried declined from 17.5 years in 1995 to 17.0 years in 1998. In the 1998 NDS survey the median age at first use of LSD was 18.0 years, 21.4 years for ecstasy, and 20.4 years for cocaine. There is also evidence that the age of first heroin use is falling (Darke et al., 2000).

4.2.3 AGE DIFFERENCES

Tobacco

According to the Queensland component of the 1999 ASSADS (Stanton et al., 2000) the prevalence of tobacco use within the last seven days increased across year levels, ranging from 5% in Year 7 (12 to 13 year olds) to 35% in Year 12 (17 years old on average). The greatest involvement with smoking was after Year 8. Similarly, data from the 2000 QYPMHS (Donald et al., 2000) reported that the older age group (18 to 24 years) were more likely to smoke than the younger age group (15 to 17 years).

Alcohol

Prevalence of alcohol consumption increases with age. In the 1999 ASSADS sample (Stanton et al., 2000) more than 50% of Queensland students by Year 11 had consumed at least one alcoholic drink in the previous week. About 90% of students in Year 11 and 98% in Year 12 had drunk at least one alcoholic drink in the previous year. Likewise, the QYPMHS (Donald et al., 2000) found that the older age group were more likely to drink alcohol than the younger group.

Illicit drugs

The prevalence of use of most illicit drugs (especially marijuana) among Queensland school students has been found to increase with age (Stanton et al., 2000). About 10% of students in Year 7 have used marijuana, while 55% in Year 12 have done so. Recent use (last four weeks) was reported by 3% of students in Year 7 and over 20% in Year 12. Less substantive trends in consumption across year levels were also reported for tranquillisers, amphetamines, and LSD.

Notably, the proportion of students who have ever used inhalants was higher among the younger groups (Years 7 to 9). The QYPMHS (Donald et al., 2000) also reported an increase of illicit drug use prevalence with age, except for the use of inhalants, for which both younger and older respondents reported similar levels of use. The prevalence of intravenous drug use was higher among those aged 18 to 24 years.

4.2.4 GENDER DIFFERENCES

Tobacco

The 1999 Queensland ASSADS (Stanton et al., 2000) found that a slightly higher proportion of male students had smoked within the past week (25% males vs. 23% females). The proportion of students who had smoked within the last 12 months was very similar for males and females (41% males vs. 42% females). However, more males than females in Year 7 and 8 had smoked within the last 12 months, while more females than males in Years 9 to 12 had done so. In the QYPMHS (Donald et al., 2000) no significant difference in smoking prevalence between young males and females was found.

Alcohol

Regarding alcohol use in Queensland, more male than female students (Stanton et al., 2000) were found to have consumed alcohol in the last seven days (42% vs. 34%). On the other hand, the QYPMHS (Donald et al., 2000) found no significant difference between males and females.

Illicit drugs

According to the 1999 Queensland ASSADS (Stanton et al., 2000), male students were more likely than females to have ever used all types of illicit drugs or have used them within the last seven days. The proportion of male students who had used marijuana within the last week was 12% compared with 7% of female students. In contrast, the QYPMHS reported few differences between

young men and women in the use of illicit drugs, except for hallucinogens, which had been used mostly by male respondents (Donald et al., 2000). Some interactions with age were observed: younger males (15 to 17 year olds) were the least likely group to use sedatives and older males (18 to 24 year olds) were the most likely group to use hallucinogens and to have used marijuana in the past four weeks.

4.2.5 LEVEL OF USE

Tobacco

In the 1999 Queensland ASSADS students were asked to record the number of cigarettes smoked on each day in the previous week (Stanton et al., 2000). The mean number of cigarettes per week was very similar among males (26.7) and females (26.2), but increased with age (from 10.2 cigarettes per day in Year 7 to 35.1 in Year 12). The mean number of cigarettes markedly increased in Years 11 and 12. In the QYPMHS (Donald et al., 2000), 10.5% of respondents were heavy smokers (11+ cigarettes per day). Females were more likely to be light smokers (1-10 cigarettes per day) and males more likely to be heavy smokers. Heavy smokers were more likely to be in the older age group (18 to 24 year olds).

Alcohol

Respondents in the ASSADS were also asked about the number of alcoholic drinks consumed in the week prior to the survey. On average, 7.6 drinks were consumed during that period (Stanton et al., 2000). Males consumed a higher number (mean of 8.5 per week) of drinks than females (mean of 6.7 per week). The number of drinks increased with age (from 4.3 drinks per week in Year 7 to 12.8 in Year 12) and an overall increase was seen in Years 11 and 12. The level of binge drinking, that is the consumption of five or more standard drinks in a drinking session, was assessed in the QYPMHS (Donald et al., 2000). Overall, 33.0% of respondents reported binge drinking in the previous week and 12.5% did so on two or more days of that week. Males compared with females and older respondents compared with the younger ones were significantly more likely to binge drink.

Illicit drugs

No data is available in relation to the amount and frequency of use of illicit drugs among young Queenslanders. The results of the 1999 national ASSADS (White, 2001) show that among Australian students who reported using cannabis in the

previous year, 31% of males and 34% of females had used it only once or twice, and this proportion was inversely related to age. Use of cannabis on ten or more occasions in the previous year was reported by 39% of boys and 32% of girls. The majority of students who reported having used other illicit drugs in the previous year had used them infrequently. Among those who used tranquillisers, inhalants, hallucinogens, amphetamines, opiates, cocaine or ecstasy in the previous year, about 45% to 55% of boys and girls had used them only once or twice, whereas 15% to 25% had done so 3-5 times. About 50% of students who had used cannabis, amphetamines, hallucinogens or ecstasy in the previous year were drinking alcohol or smoking tobacco at the same time.

4.2.6 WHERE OBTAINED FROM

Tobacco

According to the 1999 Queensland ASSADS (Stanton et al., 2000) the single most common source of cigarettes was from friends (40.5% of males, 41.5% of females). About 29% of students (31% of males and 27% of females) had bought their last cigarette. Petrol stations, convenience stores, and supermarkets were the most common sources for purchasing cigarettes.

Alcohol

Among Queensland school students who had consumed alcohol in the previous week, 34% had obtained it from their parents, 19% reported that 'someone else bought it for them' and 18% said that 'friends gave it to them'. Purchase of alcoholic drinks was less common than getting them from other sources (Stanton et al., 2000).

Illicit drugs

No data was found regarding the sources of illicit drugs among young people in Queensland. Reports from the 1998 NDS on cannabis use among Australian adolescents (Reid, Lynskey, & Copeland, 2000) show that a friend or acquaintance was the most common source of both first use (84.7% of those who have ever used cannabis) and current use (86.3% of current users). Very few adolescents first obtained cannabis from a street dealer (3.0%) or a sexual partner (3.5% of female cannabis users). The proportion of current users who obtained cannabis from a street dealer increased with age (from 4.5% of 14 to 15 year olds to 9.7% of 18 to 19 year olds).

4.2.7 SETTING USUALLY USED

Among Queensland school students, the most common place for alcohol consumption was home, followed by parties and friends' homes (Stanton et al., 2000). The beach, hotels and clubs were used more often by Year 12 students. Regarding cannabis, young respondents to the 1998 NDS (Reid et al., 2000) who reported current use of it did so at a friends' home (80.5%), parties (69.6%), their own home (42.0%), public places (33.3%) such as parks, or in cars or other vehicles (21.6%). One in ten students aged 14 to 17 years had used cannabis at school or other educational institution.

4.3 SPECIFIC POPULATIONS

It is commonly acknowledged that certain population groups are at higher risk of developing harmful drug use behaviours or experiencing drug-related harm (Australian Institute of Health and Welfare (AIHW), 2003), and therefore require specific preventive and educational strategies. This section explores the prevalence of substance use in three population groups within the wider young Australian community: Indigenous peoples, young people from culturally and linguistically diverse backgrounds, and pregnant young women.

4.3.1 YOUNG INDIGENOUS PEOPLES

According to the 1996 Census, Indigenous people represent about 4% (over 27,000) of the young population in Queensland (the national average among young people was 3%) (Australian Bureau of Statistics (ABS), 1998). Recent Australian research (Forero, Bauman, Chen, & Flaherty, 1999; Gray, Morfitt, Ryan, & Williams, 1997) has shown that Indigenous young people aged 13 to 17 years are more likely than non-Indigenous adolescents to use drugs. Gray et al (Gray et al., 1997) found that 43% of Indigenous young people aged 8 to 17 years in the town of Albany, Western Australia had used at least one substance, most commonly tobacco, alcohol and cannabis. Thirteen percent made some use of alcohol and/or tobacco, 15% were polydrug users, and 15% were frequent polydrug users. Overall, the use of drugs increased with age, with 48% of those aged 15 to 17 years being frequent polydrug users. Forero and colleagues (Forero et al., 1999) analysed Indigenous data from the 1989, 1990 and 1996 New South Wales ASSADS and found that Indigenous students were more likely than non-Indigenous students to report themselves as medium or heavy drinkers, and to use tobacco, cannabis and other illicit drugs. However, research on a younger population (those aged 9 to 13 years) from three schools in Far North

Queensland found that Indigenous young people were not more likely than non-Indigenous children to have experimented with substances (Dunne, Yeo, & Keane, 2000). Accordingly, the increase of substance abuse among Indigenous young people appears to occur in the early stages of secondary school.

4.3.2 YOUNG PEOPLE FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS

Results from the 2001 NDS household survey show that the overall prevalence of use of tobacco, alcohol and other substances among people aged 14 years and over from culturally and linguistically diverse backgrounds (CALD) is lower than for young people of an English speaking background (Australian Institute of Health and Welfare (AIHW), 2003). However, the level of substance use among CALD young people appears to become more like that of young people in the wider Australian community (Queensland Health, 1996).

4.3.3 YOUNG PREGNANT WOMEN

A strong case for public health action to reduce and prevent smoking, alcohol and other drug use among pregnant women exists. Smoking during pregnancy has been found to be harmful to both the foetus and the pregnant women and is associated with a range of negative health outcomes such as ectopic pregnancy, spontaneous abortion, pre-term premature rupture of membranes, abruptio placentae (premature separation of the normally implanted placenta from the uterine wall), placenta previa, pre-term delivery, low birth weight, stillbirth, and neonatal deaths (McDermott et al., 2002). Children exposed to alcohol during pregnancy are at risk of developing Foetal Alcohol Syndrome or FAS (facial malformations, growth retardation, and neuro-developmental abnormalities), alcohol-related birth defects, and alcohol-related neuro-developmental disorder. Similarly, the use of illicit drugs during pregnancy has shown to increase the incidence of prematurity, low birth weight, reduced birth length, and small head circumference (Singer et al., 2002).

Australian data has shown that about 35% of pregnant women aged 18 to 23 years are smokers. Nine percent report smoking between 1 and 9 cigarettes per day, 10% between 10 and 20 per day and 9.5% more than 20 cigarettes per day (McDermott et al., 2002). No prevalence data was found for alcohol and illicit drug use among Australian young pregnant women. However, Turner et al (Turner, Russel, & Brown, 2003) found that pregnancy was significantly associated with polydrug use among women aged 22 to 27 years.

4.4 CONSEQUENCES OF TOBACCO, ALCOHOL AND ILLICIT DRUG MISUSE

Substance use increases the risk of illness, injury, violence, crime and social alienation (Moon et al., 1999). Tobacco use has been associated with coronary heart disease, cancer (particularly lung, mouth and cervix), stroke, chronic lung disease, peptic ulcer, low birth weight and perinatal death. High levels of alcohol consumption are associated with coronary heart disease, liver and pancreatic disease, stroke, high blood pressure, cancer (particularly of the gastrointestinal tract), road traffic and other accidents, mental illness and violence. The toxicity of illicit substances, the mode of drug administration, and environmental factors associated with these drugs, such as crime, violence and poor standards of living, also increase the risk of morbidity and mortality.

According to the Australian Institute of Health and Welfare (Moon et al., 1999), the total drug-related morbidity rate for 12 to 24 year olds in Australia was 14 per 100,000 in 1997-98. The same rate was reported for drug-related deaths. Interestingly, alcohol-related hospitalisations and hospitalisations due to drug dependency for this age group reported similar rates (77.0 and 72.1 per 100,000 respectively). In addition, alcohol-related mortality (6 per 100,000 when attributable estimates of alcohol-related road traffic accidents are included) was similar to drug dependency-related deaths (5 per 100,000). Tobacco is not a significant cause of death among young people (tobacco-related deaths occur at older ages). Alcohol-related deaths among young people are frequently underestimated in the deaths database (e.g. according to the database seven people aged 12 to 24 years died from an alcohol-related death in 1997) (Moon et al., 1999). However, the Federal Office of Road and Safety has stated that, '28% of driver/rider motor vehicle accidents deaths in 1996 amongst males aged 16 to 19 years had a blood alcohol concentration greater or equal to 0.10g/100ml' (Moon et al., 1999). Deaths of passengers or occupants from other vehicles involved in these accidents are not included in these figures.

In 1997, there were 144 deaths among young people (12 to 24 years old) caused by drug dependence, 132 due to morphine or a combination of morphine with any other drug, 19 due to opiates and related narcotics, and 10 caused by tranquillisers and other psychotropic agents (Moon et al., 1999).

4.5 RISK AND PROTECTIVE FACTORS FOR SUBSTANCE USE

There is a substantial amount of literature, mainly from the US, regarding risk and protective factors for substance use (Gilvarry, 2000; Swadi, 1999). These factors may be influenced by changing patterns and cultural differences (Gilvarry, 2000). A brief overview of the most common risk and protective factors is presented in Table 4.3. Many of them have been implicated in the initiation, maintenance and escalation of drug use, and commonly they overlap. Often, the factors associated with use are different to those associated with misuse. According to Swadi (Swadi, 1999), 'protective factors are just as important as risk factors. We now know more about what makes some adolescents more vulnerable to substance use than others and we may be in a better position to reduce this risk' (p. 221).

TABLE 4.3: Overview of risk and protective factors for substance use among young people

Risk factors	Protective factors
• Constitutional risk factors	
<ul style="list-style-type: none"> Personality attributes (high novelty seeking, poor self-control, low harm avoidance, high reward dependence in pre-adolescent years, tolerance for deviance, negative effect) - Aggression and antisocial behaviour (delinquency, dropping out of school) - Psychopathology (conduct disorder, attention deficit hyperactivity disorder (ADHD), mood disorders) - Previous substance use - Perinatal complications - Neuropsychological deficits - Genetic factors 	<ul style="list-style-type: none"> - Positive family relationship, involvement and attachment (parental support, mutually affectionate parent-adolescent relationship, strong family bonds) - Parent monitoring - Religious practice - Positive temperament - Intellectual ability - Low novelty-seeking behaviour - Avoidance of friendships with delinquent peers - External support system that encourages pro-social values - Resilience (better problem-solving skills, greater self-esteem)
• Environmental risk factors	
<ul style="list-style-type: none"> - Peer influence - Parental substance use - Family relationships and dynamics (parental divorce, parental discord, family disruption, parental non-directiveness, negative communication, inconsistent parental discipline, lack of closeness, excessive punishment) - Social deprivation and community disorganisation (neighbourhood crime, drug availability, tolerance and acceptance of drug use, lack of community support structures) 	

Risk factors	Protective factors
<ul style="list-style-type: none"> • Life events and experiences 	
<ul style="list-style-type: none"> - Bereavement - Unwanted pregnancy - Major illness - Sexual abuse in childhood or adolescence - Homelessness 	

Source: (Gilvarry, 2000; Swadi, 1999)

4.6 SUMMARY

Some key points regarding the prevalence of tobacco, alcohol and illicit drug use among young Queenslanders should be highlighted:

- Overall, patterns of substance use among young Queenslanders are consistent with the rest of Australia and the world.
- Whereas young males report similar prevalence of tobacco use to females, the prevalence of alcohol and illicit drug use is higher among males. However, tobacco and alcohol use is increasing among young women.
- Young males are more likely to be heavy smokers and drinkers and to use cannabis more frequently than females.
- The majority of Australian secondary students who use illicit drugs do so infrequently.
- The prevalence and level of substance use increases with age, particularly after Year 11 of secondary schooling.
- The age of initiation of illicit drug use is decreasing in Australia and worldwide (from older to younger age cohorts).
- Friends are the most common source of tobacco and illicit drugs. Alcohol is frequently obtained from parents and friends.
- Those who consume alcohol and/or illicit drugs usually do so at parties, at their own homes or at friends' homes.
- Young Indigenous people aged 13 to 17 years are more likely than non-Indigenous young people to use substances.

- The increase of substance abuse among young Indigenous Australians occurs at the early stages of secondary school.
- One third of pregnant women aged 18 to 23 years use tobacco.

5. RESPONSES TO TOBACCO, ALCOHOL AND ILLICIT DRUG USE AMONG YOUNG PEOPLE

This chapter details a range of Australian responses to tobacco, alcohol and illicit drug use among young people. The first section of this chapter examines the current national and Queensland policies and strategic frameworks in relation to licit and illicit drug use and young people. This is followed by an overview of contemporary national and interstate population-based prevention initiatives that seek to address tobacco, alcohol and/or illicit drug use among young people. The last section then documents four complimentary Queensland initiatives that aim to reduce and/or preventing licit and illicit drug use in young people in a manner similar to that employed in the 100% IN CONTROL campaign.

5.1 POLICY CONTEXT OF RESPONSES TO TOBACCO, ALCOHOL AND ILLICIT DRUG USE

Since 1985 Australia's drug policy has been characterised by a health-focused approach to dealing with licit and illicit drug use. This policy was initially formulated on the basis of growing public and political concern over rising rates of illicit drug use in Australia and worldwide, and a growing recognition of the health and economic costs associated with both licit and illicit drug use. Harm minimisation provides the policy framework for this approach and, although the meaning of and support for this concept has changed somewhat over the last two decades (Bammer, Hall, Hamilton, & Ali, 2002 p. 87), this principle continues to guide all drug strategies in Australia. Broadly speaking, harm minimisation "aims to improve health, social and economic outcomes for both the community and the individual and encompasses a wide range of approaches, including supply-reduction, demand-reduction and harm-reduction strategies" (Ministerial Council on Drug Strategy, 1998 p. 1).

Preventing the uptake of drugs in young people has also been a central focus of Australian drug policy since 1985, with this priority being maintained through several phases of the National Drug Strategy and in the recent national and State action plans. However, despite this consistent focus on preventing youth drug use over the last two decades, drug use among young people has apparently continued to increase and the age of initiation for drug use has decreased. Yet this does not necessarily indicate an inherent flaw in the direction of Australia's

current drug strategy, as these rates need to be examined within the context of the broader societal influences impacting upon young people.

The structural determinants of youth drug use are multiple and complex, and drug use should not be seen as simply an individual behaviour but rather as being shaped by a range of macro-environmental factors, including the economic, social and physical environment. The implication of this understanding for youth drug prevention programs is that programs should: (i) address multiple risk and protective factors; (ii) work at the individual, family, local and macro-environment levels; (iii) set specific, measurable and realistic objectives; and (iv) be based on a long-term perspective, as one-off initiatives have been shown to be ineffective (National Drug and Alcohol Research Centre, 2001). In terms of drug policy, a broader view of drug prevention needs to be adopted. For youth drug prevention this includes moving the focus from the individual and the problem of 'drug use' to the creation of health-promoting environments for young people, addressing human developmental processes and targeting the crucial transition stages, and developing effective and formal partnerships across government and community organisations and between primary and secondary prevention campaigns.

Moreover, the contribution of multiple factors at differing levels and entry points to the development of substance use and misuse, in combination with the commonality between the risk and protective factors for substance use and a range of other adverse developmental outcomes, suggests the need for comprehensive and coordinated approaches to addressing the needs of young people. Such approaches must of necessity encompass influences that range from distal to proximal and must engage a wide range of groups, organisations and communities. Consistent and complementary efforts by government and non-government portfolios and agencies across health, education, youth affairs, welfare, criminal justice, and employment, to name but a few, are essential to achieving positive outcomes for young people. In addition to consistency with current national and state drug policy, consideration of principles underlying key related national and state strategies needs to inform future directions for the 100% IN CONTROL campaign. Table 5.1 below identifies a number of these core policy documents. Specific substance use policy documents are presented in Table 5.2

Table 5.1 Related National and State policy documents

Related Policy Documents	
National Policy Documents	State Policy Documents
National Health Policy for Children and Young People (1995)	A Strategic Framework for Children's and Young People's Health 2002-2007 (2002)
National Health Plan for Young Australians (1997)	Queensland Government Youth Participation Strategy (2000)
National Mental Health Strategy: First and Second National Health Plans (1992, 1998)	Smart State Health 2020 (2002)
National Action Plan for Promotion, Prevention and Early Intervention for Mental Health (2000)	Queensland Health Strategic Plan 2000-2010 (2000)
Living is for Everyone: A Framework for the Prevention of Suicide and self-Harm in Australia (2000)	Social Determinants of Health: The Role of Public Health Services (2001)
National Action Plan for Depression (2000)	Ten Year Mental Health Strategy for Queensland (1996)
Stronger Families and Communities Strategy (2000)	Future Directions for Child and Youth Mental Health Services: Implementation Framework (2000)
Healthy Horizons: A Framework for Improving the Health of Rural, Regional and Remote Australians 1999-2003	Promotion, Prevention and Early Intervention: Improving the Mental Health and Well-being of Queenslanders (2001)
National Crime Prevention Programme: Youth Crime and Families Strategy	Reducing Suicide: The Queensland Government Suicide Prevention Strategy 2003-2008 (2003)
Pathways to Prevention (1999)	Putting Families First Policy Statement (2000)
National Youth Pathways Action Plan: Footprints to the Future Taskforce Report (2001)	Queensland Families: Future Directions (2002)
	Towards a Queensland Government and Aboriginal and Torres Strait Islander Ten Year Partnership 2001-2011 (2001)
	Framework for Action in Aboriginal and Torres Strait Islander Health (1999)
	Strategic Policy Framework for Aboriginal and Islander People's Health 2002-2007 (2002)
	Queensland Health Aboriginal and Torres Strait Islander Environmental Health Strategy 2001-2006 (2001)
	Aboriginal and Torres Strait Islander People: Queensland Mental Health Policy Statement (1996)
	Non-English Speaking Background Mental Health Policy Statement (1995)
	Community Renewal Strategy (1998)

Related Policy Documents	
National Policy Documents	State Policy Documents
	Queensland Crime Prevention Strategy: Building Safer Communities (1999) A Strategic Framework for Community Crime Prevention (2002) QSE 2010 Education Queensland (2000)

At the time of the Review, a number of significant policy documents remained to be finalised. These included the National Strategic Framework for Aboriginal and Torres Strait Islander Health and the National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004-2009. Consideration of the key policy elements within these documents will be necessary with the release of these frameworks.

While an in-depth, detailed analysis of the content and inter-relationships between these policy documents, the more specific substance use policy documents and the 100% IN CONTROL campaign was outside the scope of this review, a rapid appraisal identified a number of core elements which need to be considered. Most notably these include:

- Moving towards balancing the investment in health by recognising the benefits associated with promoting health and preventing ill health;
- The importance of incorporating evidenced based approaches to achieving positive health outcomes;
- An emphasis on integrating current knowledge of developmental pathways for young people, with particular foci on the importance of early childhood context and influences, targeting transitions and addressing both risk and protective factors;
- The need for comprehensive approaches to the prevention of substance use and misuse that take into account the multi-levelled influences on substance use and the range of settings in which initiatives and interventions may be delivered;
- The importance and value of synergy across diverse sectors and the associated need for collaboration and partnerships to ensure a coherent, coordinated and consistent response;

- Regard for cultural and community diversity by tailoring initiatives to meet the specific needs of particular groups;
- The need for the enhancement of current workforce capacity to enable the effective implementation of health promotion approaches; and
- The need for fostering local community support and action through the development of community capacity to work with others to develop local solutions for addressing a range of negative health and social outcomes.

Table 5.2 Substance Use policy documents

Drug Policy Documents		
	National Policy Documents	State Policy Documents
Overall	National Drug Strategic Framework 1998-99 to 2002-03: Building Partnerships National Drug Strategy Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003-2006	Beyond A Quick Fix: Queensland Drug Strategic Framework 1999/2000 to 2003/2004 Meeting Challenges, Making Choices: The Queensland Government's response to the Cape York Justice Study.
Tobacco	National Tobacco Strategy 1999 to 2002-03: A Framework for Action	Towards a Smoke Free Future: Queensland Tobacco Action Plan 2000/2001 to 2003/2004
Alcohol	National Alcohol Strategy: A Plan for Action 2001 to 2003-04 Australian Alcohol Guidelines – Health Risks and Benefits	Queensland Alcohol Action Plan – (currently being developed)
Illicit Drugs	National Action Plan on Illicit Drugs 2001 to 2002-03 National Illicit Drug Strategy: "Tough on Drugs"	Queensland Illicit Drug Action Plan – (currently being developed)
Schools	National School Drug Education Strategy National Framework for Protocols for Managing the Possession, Use and/or Distribution of Illicit and Other Unsanctioned Drugs in Schools	Drug Education and Intervention in Schools. School Drug Education: Policy, Principles, Practice for Health Workers

5.1.1 OVERVIEW OF NATIONAL POLICY

National Drug Strategy

Until the mid-1980's Australia's efforts on controlling drug use, in particular illicit drug use, were focused on application of the Customs Act. The launching of the first National Drug Strategy in 1985, with the associated National Campaign Against Drug Abuse (NCADA), effectively shifted the focus away from law enforcement towards a more multi-faceted approach to managing drug problems (Fitzgerald & Sowards, 2002), although it has been argued that the harm minimisation approaches central to NCADA was only "a thin veneer covering a very solid core of law enforcement intended to restrict drug supply" (Wodak & Moore, 2002 p. 17). Nevertheless, the NCADA injected significant funds into prevention activities, placing a major emphasis on reducing the demand for drugs through education using large-scale media campaigns. In addition, the NCADA provided a framework for liaison and cooperation between the state and federal governments. In 1993, the NCADA was replaced by the National Drug Strategy (NDS). The NDS was underpinned by six key concepts: harm minimisation; social justice; maintenance of controls over supply; an intersectoral approach; international cooperation; and evaluation and accountability. An emphasis was placed on the need for an evidence-based approach.

The National Drug Strategic Framework (NDSF) supplanted the NDS in 1997. The National Drug Strategic Framework 1998-99 to 2002-03: Building Partnerships underpins this latest phase of the NDS and sets the policy framework for current approaches to drug problems. To enable evaluation and further development of the NDSF this phase was extended until June 2004.

The NDSF maintains the policy principles of the previous phases of the NDS and overall adopts a balanced approach to drug policy, incorporating:

- A focus on licit and illicit substances;
- Supply reduction, demand reduction and harm reduction; and
- Prevention, training and research.

As reflected in its title, the emphases on the key elements of partnerships, coordination and integration have been maintained in the NDSF. The mission of the NDSF is "...to improve health, social and economic outcomes by preventing the uptake of harmful drug use and reducing the harmful effects of licit and illicit

drugs in Australian society” (Ministerial Council on Drug Strategy, 1998 p. 19). Importantly, national drug policy has been characterised by strong bipartisan support at the both the federal and state levels, as well as cooperation between all levels of government and intersectoral collaboration between health and law enforcement. However, a gradual weakening of this bipartisan support has been evidenced since 1997, in part as a consequence of the Prime Minister and cabinet vetoing prescribed heroin trials, which had majority approval from state, territory, and federal health and law enforcement ministers (Bammer et al., 2002 p. 87).

The rhetoric of prevention and harm minimisation also continues to permeate current drug policy within Australia, despite growing debates over the retention of harm minimisation as the goal of national drug policy (Bammer et al., 2002). In its broadest sense, harm minimisation aims to prevent and reduce drug-related harms to individuals and the community. Abstinence is acknowledged as the most effective way to avoid drug-related harms; however, the recognition that drug use may never be completely eliminated from society underpins the harm minimisation approach and the three core strategies of supply reduction, demand reduction and harm reduction. In the NDSF, all three strategies are addressed within the eight priority areas for future action, with preventing use and harm being one of these eight priority areas. In terms of effective implementation of all three strategies, a major criticism arising from the consultations for the evaluation of NDSF was that greater attention needed to be developed on prevention, education and research (Success Works, 2003 p. 39). Subsequently, it was suggested that a major focus on demand reduction and prevention be employed within the next stage of the NDSF (Success Works, 2003).

Fundamental to increasing a focus on demand reduction and prevention is the development of an integrated approach and greater linkages between prevention strategies. Yet, in terms of linkages between the diverse range of primary and secondary prevention campaigns currently being offered by the differing levels of government and governments departments, service delivery sectors and community agencies, there is very little integration or acknowledgement (Success Works, 2003). From the perspective of policy development this issue translates into priority areas encompassing, among other things, the development and formalisation of partnerships, the recognition of linkages between campaigns by the NDSF, and increased emphasis on actual and potential partnerships between national, state and territory campaigns.

Four National Drug Action Plans, for tobacco, alcohol, illicit drugs, and school drug education, accompany the NDSF. The stated purpose of these action plans is to provide a focus for determining resource priorities under the NDSF, to identify harm reduction priorities and strategies and performance indicators, and to reflect the agreement of COAG that the National Illicit Drug Strategy will be a principle component of the next phase of the NDS. In addition to the four national action plans a fifth action plan has been developed which specifically focuses on Indigenous peoples. This action plan sits between the national framework and the other four action plans and is intended to complement and increase their applicability to this specific population.

Indigenous peoples

The Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006 (Ministerial Council on Drug Strategy, 2003a) was released in August 2003 as a complementary action plan, positioned between the NDSF and the four other national action plans. The action plan resulted from the recognition that the umbrella framework of the NDSF and the four national action plans did not always adequately address issues surrounding licit and illicit drug use by Indigenous peoples. The Aboriginal and Torres Strait Islander Peoples' Reference Group developed the action plan, in consultation with Indigenous peoples and organisations, government and non-government groups, and a range of key stakeholders.

Overall, the action plan provides a national policy direction for reducing harms associated with licit and illicit drug use by Indigenous peoples and recognises the similarities and differences between Aboriginal and Torres Strait Islander peoples, as well as the diversity within these two broad cultures. In this way, the Aboriginal and Torres Strait Islander Peoples Complementary Action Plan is supplemented by a second action plan, the Torres Strait and Northern Peninsula Area Complementary Action Plan 2003-2006 (Australia, 1999; Ministerial Council on Drug Strategy, 2003b). The six key result areas contained in both plans are similar, although the objectives and actions within each key result area differ according to cultural, geographical, resource and other differences between these two cultures. In these six key result areas, young Indigenous peoples are not specifically identified as a target population, though prevention of licit and illicit drug use is addressed in key result area four. A Background Paper, Summary document and Glossary also accompany these two action plans.

Both action plans emphasise the need for a culturally appropriate and holistic approach to licit and illicit drug use issues in Indigenous peoples and the role dispossession and alienation has played in the health and well-being of these populations. With respect to national drug policy, the Aboriginal and Torres Strait Islander Peoples Complementary Action Plan is the first national strategy to directly address licit and illicit drug use in Indigenous peoples. In this way, the document represents the growing recognition of the special challenges faced by Indigenous peoples within Australia.

Tobacco

In 1991, the Ministerial Council on Drug Strategy (MCDS) endorsed the National Health Policy on Tobacco, which articulated and formalised tobacco control as a health concern within Australia. Building onto this policy, the National Tobacco Strategy 1999 to 2002-03 (NTS) was endorsed by the MCDS in June 1999. As a component of the NDSF, the NTS provides a national framework for tobacco control and reaffirms the goal of the 1991 National Health Policy on Tobacco: 'To improve the health of all Australians by eliminating or reducing their exposure to tobacco in all its forms' (Commonwealth of Australia, 1999 p. 2). The Ministerial Tobacco Advisory Group (MTAG), and later the National Expert Advisory Committee on Tobacco (NEACT) which replaced MTAG, played a key role in the development of the NTS. Companion documents to the NTS include a Background Paper and Summary Plan.

The National Tobacco Strategy contains a strong prevention and harm reduction focus with one of the four key strategy objectives being to prevent the uptake of tobacco in non-smokers, especially children and young people. Children and young people under 18 years are also specifically addressed as an identified population in the NTS, with the caveat that more detailed and targeted action plans are required for this population than what can be contained in a broad, overarching national strategy.

Under the NTS, a diverse range of tobacco control initiatives have been implemented, including the wide reaching prevention focused National Tobacco Campaign (NTC). Although initially preceding the NTS, the NTC is a mass media led prevention campaign that has involved three phases, with the third phase focusing on specifically increasing the relevance of the anti-tobacco message for young people. The NTC has undergone extensive evaluation since its inception, while the evaluation of the NTS, the plan of which was to be developed by the National Expert Advisory Committee, is expected to proceed in 2003 or 2004.

Alcohol

The National Alcohol Strategy: A Plan for Action 2001 to 2003-04 (NAS) (Ministerial Council on Drug Strategy, 2001a) replaced the National Health Policy on Alcohol in Australia (NHPAA) in 2001. The preceding NHPAA, which had been developed under NCADA, had been endorsed by MCDS in 1989. Overall, the NHPAA identified the need for comprehensive programs that minimised alcohol-related harms and combined education, health promotion, training, treatment, and control policies and measures. The NAS is underpinned with this same policy direction. Developed as a complementary strategy to the NDSF, the NAS addresses the objectives and priority areas of the NDSF specifically in relation to alcohol and maintains a strong alignment with the concepts of prevention and harm minimisation. The background paper Alcohol in Australia: Issues and Strategies (Ministerial Council on Drug Strategy, 2001b) accompanies the NAS, and the NHMRC Australian Alcohol Guidelines: Health Risks and Benefits (Commonwealth of Australia, 2001) document underpins the harm minimisation approach to alcohol consumption advocated in the NAS. In 2002, the National Alcohol Research Agenda was also released as a supporting document for the NAS. This publication is intended to provide a research agenda for alcohol research in Australia and to enhance the evidence base for the key strategies in the NAS. Evaluation of the National Alcohol Strategy is expected to proceed in 2003-04.

The NAS contains eleven key strategy areas, with objectives, actions and outputs for each area. Together the eleven strategy areas provide a framework for action in the areas of education, public health, law enforcement and research.

Preventing alcohol-related harm in young people is identified as a key strategy area in the NAS, with the stated objective being the reduction in onset of high-risk patterns of alcohol consumption during adolescence. The action issues associated with this strategy area include mental health promotion, parenting skills, joint activity, education and information for young people, and the separation of sporting activities and high-risk drinking. Overall, the concept of risk and protective factors underlies the prevention approach contained in this key strategy area, with a major focus being the identification and modification of these factors as they relate to alcohol consumption in young people. Information and education initiatives such as the National Alcohol Campaign (NAC) also address this key strategy area. Launched in 2000, the primary focus of the NAC is to reduce alcohol-related harm for young people aged 15 to 17 years and to provide

information and support for parents of young people aged 12 to 17 years. To date, three evaluations of the NAC have been conducted.

Illicit drugs

In 1997 the Prime Minister launched the National Illicit Drug Strategy (NIDS) 'Tough on Drugs' (Commonwealth of Australia, 1997) as a major component of the NDS, with funding for four years being directed towards a range of demand reduction and supply reduction activities. Explicit attention to harm reduction activities is not evident in NIDS while a strong inference of zero tolerance towards illicit drug use is apparent. In 'Tough on Drugs', law enforcement and interdiction is a central budgetary concern and increased funding is directed towards abstinence-orientated treatment and programs such as National Illicit Drug Diversion Initiative (Bammer et al., 2002). To date, NIDS continues to be a significant component of the Australian National Drug Strategy. Following the launch of the NDSF in 1998, the National Action Plan on Illicit Drugs (NAPID) (Ministerial Council on Drug Strategy, 2001c) was developed and released in 2001. This action plan seeks to provide directions for addressing illicit drug issues in Australia within the harm minimisation philosophy of the NDSF. A Background Paper and Summary Fold-out have also been developed as companion documents to NAPID.

Overall, the seven key strategy areas identified in NAPID address preventing the uptake of illicit drug use and reducing the harms associated with use. By necessity, NAPID deals with greater complexity than the tobacco and alcohol action plans as it encompass several substances with differing prevalence levels, determinants and associated harms. It addresses this complexity by providing a broad framework for action and promoting the adoption of different combinations of policies and strategies depending on the substance and evidence base. Strong emphasis is also given to the building of partnerships and intersectoral collaborations around all strategy areas. While the National Action Plan on Illicit Drugs is in many ways aligned with the National Illicit Drug Strategy, the fundamental differences between these two strategies (in terms of scope and an emphasis on prevention and harm reduction) reflect existing tensions in Australian drug policy direction. Primarily, this tension surrounds the growing currency of a zero tolerance approach among government policy makers in opposition to the widely accepted harm minimisation approach that has underpinned the NDS since 1985 (Munro & Midford, 2001).

The first key strategy of NAPID, demand reduction, focuses on young people and the prevention and reduction of illicit drug use within this population and other at-risk populations. In the Background Paper accompanying the action plan, current literature is extensively drawn upon to examine the efficacy of a number of demand-reduction strategies including school drug education, social marketing, risk and protective factors, investment in infrastructure (social, economic and human capital), and links with crime prevention. With regard to social marketing it is highlighted that while early evaluations of mass media public education campaigns showed little or no results in terms of effectiveness in reducing drug uptake, these campaigns "...play an important role if specific and realistic outcomes are identified, and if they follow certain best-practice principles" (Ministerial Council on Drug Strategy, 2001c p. 16). Overall, the principle message promulgated in this key strategy area, and in NAPID overall, is that an effective prevention approach for reducing illicit drug use in young people needs to combine a range of strategies and policies to reflect the multiple, interactive and complex determinants of illicit drug use.

School-based drug education

At the eighth meeting of the Council of Australian Governments (COAG) in April 1999, the Heads of Government agreed to strengthen their response to drug use within schools. This agreement reflected an increasing identification of school-based drug education as an essential component of drug prevention strategies at both the national and state level. In May 1999, the National School Drug Education Strategy (NSDES) was then released, with the Department of Education, Science and Training (DEST) (formerly Department of Education Training and Youth Affairs (DETYA)) being responsible for the development and implementation of the strategy. The strategy was funded under the education component of NIDS and, although consistent with the principles of NDSF, is largely underpinned by the notion of zero tolerance (Munro & Midford, 2001). Activities funded through the NSDES are to be informed by the principles detailed in the publication Principles for Drug Education in Schools (Bellard et al 1994), and the application of these principles is in turn to be informed by the key goal of the strategy – "no illicit drugs in schools" (Department of Education Training and Youth Affairs, 1999 p. 7-9). The NSDES contains eight objectives that cover a range of factors in preventing illicit drug use, including environmental determinants, community development, good practice models, curriculum and resources, professional development, parent engagement, identified groups, and building the evidence base for drug education programs.

The strength of the zero tolerance approach to illicit drugs in schools was also maintained in the National Framework for Protocols for Managing the Possession, Use and/or Distribution of Illicit and Other Unsanctioned Drugs in Schools (Department of Education Training and Youth Affairs, 2000). This complementary document was released in June 2000 and was intended to assist school communities with the development of policies and protocols for managing illicit drug use.

5.1.2 OVERVIEW OF STATE POLICY

Queensland drug strategy

The Queensland approach to the development of drug policy has been heavily influenced by a long period of conservative government, followed by a decade of rapid change of governments through the 1990s (Fitzgerald & Sowards, 2002). Additionally, alcohol and drug education in Queensland underwent substantial change from 1970 to 1990. That is, information-based approaches were replaced by effect-based approaches, then subsequently supplemented by educative approaches about settings, and then replaced by more integrated school-based approaches and community-based education (Mammino, 1993).

In 1993, the Queensland Cabinet endorsed the broad policy goals and priorities of the Queensland Drug Strategy: Major Policy Directions 1993-1997, as Queensland's strategic response to the NDS. At this time Cabinet also suggested further development of an integrated document through consultations with departments and community organisations with regards to the paper Queensland Drug Strategy: Examples of Strategies for Implementation. The outcome of this process was the Queensland Drug Strategy 1995-1997, which then formed the basis of drug policy in Queensland almost until the end of the decade. Six priorities were identified in the strategy, including Alcohol use and Aboriginal and Torres Strait Islander peoples, Young people, and Women. These three priorities have been maintained in Beyond a Quick Fix – Queensland Drug Strategic Framework 1999/2000 to 2003/2004 (Queensland Government, 1999a) which supplanted the Queensland Drug Strategy in 1999. The policy principles underpinning both these strategies are largely consistent, with the exception prevention and early intervention being an additional guiding principle of the latter Queensland strategy.

Beyond a Quick Fix reflects the Queensland Government's endorsement of the NDSF and is designed to mirror the national framework's governance structure

and action plan development. Like the preceding Queensland drug strategy, harm minimisation underpins Beyond a Quick Fix as the fundamental principle governing drug policies and programs in Australia. The principle of prevention and early intervention also guides the Queensland drug strategy, with a proposed focus on strengthening existing prevention measures as well as legislative and policy initiatives such as drug diversion, school-based drug education and specialist general practitioner training. Specific prevention measures are not directly mentioned in this policy document.

Young people are identified as one of seven priorities for action within the Framework, with school-based approaches, structural determinants such as homelessness, and intervention strategies and services being examined in relation to this priority area. One action area outlined for young people is the expansion of Queensland Health's 100% IN CONTROL Rumble in the Jungle initiative across the State.

Indigenous peoples

The Queensland Government initiated the Cape York Justice Study in July 2001. The impetus behind the Justice Study was the growing recognition that existing policy addressing the problems impacting upon Indigenous communities was flawed and largely ineffectual. Justice Tony Fitzgerald led the review, which culminated in a three-volume report, released in November 2001. The review process was then followed by a three-month consultation process in which up to 700 people participated in public meetings held within Indigenous communities. The Queensland Government's response to the Justice Study, Meeting Challenges, Making Choices (Queensland Government, 2002) was then released in April 2002. The policy direction, reforms and strategies contained in this document were based upon the recommendations contained in the Justice Study report, with some modifications resulting from the community responses documented in the consultation process.

In Meeting Challenges, Making Choices alcohol constitutes the principle substance of focus and is closely linked with the issue of violence. Proposed alcohol interventions focus on increased environmental controls over the supply of alcohol in and around communities, and also include: the legislative backing and expansion of Community Justice Groups in all communities; and the separation of alcohol licensing and safety and well-being responsibilities, with Community Canteen Management Boards being responsible for the former and Aboriginal and Torres Strait Islander Councils and Shires refocusing on the latter.

Overall, the rhetoric of building partnerships and increasing ownership underpins the State Government's approach in Meeting Challenges, Making Choices. Children, young people and families are also given priority within the Government's approach, with demand reduction and prevention strategies including youth-focused alcohol and drug awareness campaigns, and strategies to increase youth engagement in programs such as the State Emergency Service Cadets, the Croc festival and other alternative Indigenous festivals, and sporting and recreational programs. Meeting the education and training of Indigenous peoples is also addressed in Meeting Challenges, Making Choices, with strategies to increase school attendance being linked with drug and alcohol reduction strategies. This proposed linkage is consistent with both state and national drug policy, which emphasises the importance of combining prevention and intervention strategies to increase their overall effectiveness.

Tobacco

The Queensland Government endorsed the Queensland Tobacco Action Plan 2000/2001 to 2003/2004, Towards a Smoke-free Future, in October 2000 (Queensland Health, 2000). The action plan is Queensland's first strategic plan for addressing tobacco issues and drew upon both the Queensland Drug Strategic Framework and the National Tobacco Strategy. Although a first for Queensland, the plan built upon a number of existing initiatives, including the mass media QUIT campaign and telephone service, the tobacco sales to minors' legislation, and the School-based Youth Health Nurses Program. Like the NDSF, the action plan is underpinned by the notion of building partnerships between all levels of government and the community, to develop and implement effective tobacco control strategies. The aims of the Queensland Tobacco Action Plan reflect the harm minimisation philosophy underpinning Australian drug policy and the six key action areas addressing these aims cover the three pillars of harm reduction, demand reduction and supply reduction. These key action areas are directly congruent with the six key strategy areas of the National Tobacco Strategy.

Three priority population groups are specifically identified in Towards a Smoke-free Future: young people, Indigenous peoples and women. Under the Queensland Tobacco Action Plan, youth smoking initiatives make up a major component of the range of actions outlined in each of the six key action areas. The ineffectiveness of single, isolated campaigns and strategies for addressing youth smoking is recognised in the action plan and a series of inter-related

educational and legislative initiatives are instead put forward. In terms of preventing smoking uptake and reducing the rates of smoking among young people, the action plan draws upon evidence to support the implementation of activities that focus on building protective factors such as self-esteem and living skills. Identified campaigns and programs meeting this policy direction include Positive Parenting Programs, the School-based Youth Health Nurses Program, and the 100% IN CONTROL campaign.

Alcohol and illicit drugs

The Queensland Alcohol Action Plan and the Queensland Illicit Drug Action Plan were being developed at the time of this review. These actions plans are expected to be consistent with the NDSF and to provide a coordinated approach for addressing alcohol and illicit drug use in Queensland. Consideration of the policy framework contained in these actions plans, in terms of the alignment of 100% IN CONTROL in the context of Government policies and strategic frameworks, will be necessary with the release of these action plans.

School-based drug education

School-based drug education is primarily guided by the policies, procedures and guidelines set down by Education Queensland. At present, the document Education Queensland Policy for Drug Education and Intervention in Schools (Department of Education, 2001) provides the framework and policy for school-based drug education. This policy states that “Education Queensland accepts responsibility for educational outcomes of state school students that contribute to the public health goals of preventing and reducing drug related harm to individuals and society” (Department of Education, 2001). The policy is explicitly underpinned by the philosophy of harm minimisation and it is consistent with current national and Queensland drug strategies. Overall, school-based drug education programs are expected to align with the Principles for Drug Education in Schools (Ballard, Gillespie, & Irwin, 1994) and be consistent with the Education Queensland Policy for Drug Education and Intervention in Schools.

In addition to Education Queensland’s policy for school-based drug education, Queensland Health has developed the policy document School Drug Education: Policy, Principles and Practice for Health Workers (Alcohol Tobacco and Other Drug Services, 1996). This document states that a health worker’s role in relation to school drug education is primarily one of consultancy and support to school-based personnel. In keeping with national, state and Education Queensland drug

policies and strategies, harm minimisation underpins this policy approach and the strategies outlined in the document are based upon the Principles for Drug Education in Schools and the Ottawa Charter for Health Promotion.

A third strategy currently impacting on school-based drug education in Queensland is the Queensland School Drug Education Strategy. This strategy is funded by the Commonwealth, under the National School Drug Education Strategy, and involves the collaboration of Education Queensland, the Queensland Catholic Education Commission and the Association of Independent Schools of Queensland Inc. The policy and principles underpinning this Queensland strategy are in keeping with the 'no illicit drugs in schools' rhetoric of the National School Drug Education Strategy and the National Illicit Drugs Strategy.

5.1.3 KEY SUMMARY POINTS

In all the primary policy documents reviewed, young people were the most commonly identified population for intervention, with all but two of the documents explicitly targeting this population. The age range usually applied to this population was 12 to 17 years, although several documents referred only to children and young people without directly specifying an age range.

Indigenous peoples were the second most commonly identified population group; however, only the NDSF and the National Tobacco Strategy explicitly identified people from culturally and linguistically diverse backgrounds as a target group.

Other common target populations included pregnant women, people experiencing mental illness, parents/families, and low income/economically disadvantaged persons.

The notion of building partnerships between all levels of government and community organisations was strongly advocated in all drug policy documents reviewed. This is in keeping with the policy framework endorsed in the NDSF and reflects the growing recognition within the policy community of the importance of partnerships to build ownership and capacity, increase the effective implementation of strategies, and to reduce the fragmentation and duplication of actions and approaches.

Prevention is a key strategy area identified in all current national and state policies and strategic frameworks. As a strategy, this area was primarily explored in relation to preventing the uptake of drugs in young people although several

strategies did associate prevention efforts with all age groups. Common prevention actions included school-based education and health services, mass and multimedia campaigns, and increasing parenting skills. Several frameworks further broadened this focus to include actions that addressed wider social determinants such as poverty, employment, housing and educational opportunities.

The majority of policies and strategic frameworks gave broad consideration to the role of risk and protective factors in youth drug use; however, little depth was provided with regards to identifying and addressing specific factors.

Australia's longstanding commitment to expanding the evidence base for drug policy development and effective strategies continued to be prominent in the national and state policy documents reviewed, with many stipulating a research and evaluation agenda for accessing strategies and developing relevant best practice principles.

A number of policy-related documents also indicated that evaluations of mass and multimedia campaigns tended to show little evidence in terms of preventing or reducing drug use in young people, but that these campaigns were still considered to play an important role in the prevention agenda if coupled with other strategies and followed best-practice principles (Ministerial Council on Drug Strategy, 2001c p. 16) (Background Paper).

A strong adherence to the notion of harm minimisation underpinned all policies and strategic frameworks with the exception of the National Illicit Drug Strategy and the National School Drug Education Strategy, both of which primarily advocate an abstinence approach, particularly in relation to illicit drug use.

5.2 OVERVIEW OF NATIONAL AND INTERSTATE RESPONSES TO TOBACCO, ALCOHOL AND ILLICIT DRUG USE AMONGST YOUNG PEOPLE

This section provides an overview of identified contemporary national and interstate responses to tobacco, alcohol and illicit drug use among young people. For the purposes of this review only population-based primary drug prevention initiatives targeting young people up to 25 years were documented and the list of identified initiatives should not be considered exhaustive. Additionally, it is acknowledged that there are many relevant secondary prevention campaigns and local primary prevention projects currently being undertaken in Australia and that the development of stronger linkages between these initiatives is important

for an integrated youth drug prevention approach. These secondary prevention initiatives include things such as community renewal, mental health promotion initiatives, and youth employment and housing initiatives.

The first URL below links to an excellent website that outlines an extensive range of current national, state and territory initiatives addressing the needs of vulnerable young people. This website was developed to detail initiatives addressing recommendations 16 to 23 of the Footprints to the Future document, released by the Youth Pathways Action Plan Taskforce in 2001:

<http://www.curriculum.edu.au/mceetya/stepping/index.htm>

Other national websites for young people include:

<http://www.reachout.com.au/home.asp>

<http://www.somazone.com.au>

<http://www.thesource.gov.au/livingchoices/>

http://www.healthinsite.gov.au/topics/Adolescence/Young_people/

5.2.1 OVERVIEW AND METHOD

Overall, the national and interstate prevention initiatives identified for this review ranged from social marketing and community capacity building initiatives, to drug education and information organisations. National primary prevention initiatives were identified through a process of snowballing and Internet searches. Given the scale of resources required to run a national drug prevention campaign, it is not surprising that the five national initiatives identified were Commonwealth funded campaigns implemented as components of the National Drug Strategy. However, two national drug education and information-based organisations specifically focusing on preventing youth drug use were also identified in this review.

The documentation of the four Commonwealth campaigns was based on information obtained from the relevant campaign and government websites; however, semi-structured interviews were conducted with the key contacts of the two drug prevention organisations. The questions guiding these interviews covered the organisations' background, overarching goal, objectives, key activities and any evaluation processes undertaken. This information, together

with that obtained from the organisations' websites, was then used to document these primary prevention organisations.

Interstate responses to tobacco, alcohol and illicit drug use in young people were documented through semi-structured interviews with key contacts in each state and territory, and through the review of relevant campaign documents and websites. The method used to identify key state and territory contacts involved telephoning individuals identified in a contact list provided by Queensland Health and snowballing, whereby individuals contacted during the preliminary investigation stage were asked to identify other key contacts or campaigns within their state or territory. Semi-structured telephone interviews were then conducted with each appropriate key contact and the information gathered through this process was then cross-referenced with identified written documentation and evaluation reports.

5.2.2 NATIONAL INITIATIVES

National Tobacco Campaign – Every Cigarette is Doing You Damage

The National Tobacco Campaign (NTC) was launched in 1997 as a mass-media anti-tobacco campaign and is a collaborative initiative of the Commonwealth, state and territory governments, Quit campaigns and cancer councils. Although preceding the National Tobacco Strategy, the NTC reflects the aims and objectives of the national tobacco policy. The primary target audience of the National Tobacco Campaign is 18 to 40 year old smokers and the campaign has moved through three major anti-tobacco advertising phases to date. The third phase of the NTC has focused specifically on increasing the relevance of the anti-tobacco message for young people. The key activities of the campaign have included five television commercials, radio, print and outdoor advertising, public relations, a campaign website (<http://www.quitnow.info.au/index2.html>), non-English materials and a general practitioner strategy. The national Quitline has also been upgraded in conjunction with the implementation of the National Tobacco Campaign.

To date, evaluation of the National Tobacco Campaign has involved a two-stage process. Evaluation of the first phase of the National Tobacco Campaign sought to measure campaign reach and recognition, smoking prevalence, beliefs, attitudes and behaviour, through surveys conducted prior to the launch of the campaign in May 1997 and six months later in November-December 1997. The process also involved research undertaken with Quitline clients, culturally and

linguistically diverse communities, Aboriginal communities and young people. The National Tobacco Campaign Evaluation Report Volume One was released in May 1999. The second stage of evaluation for the National Tobacco Campaign was undertaken during 1998 and involved the tracking of the effects of phases two and three of the Campaign. Volume Two of National Tobacco Campaign Evaluation Report, released in May 2000, contains the results of this second stage of evaluation plus additional data including the economic evaluation of phase one and other campaign information not available at the time of Evaluation Volume One's publication. These two evaluation volumes can be accessed from the Commonwealth Department of Health and Ageing website:

<http://www.health.gov.au/pubhlth/publicat/document/metadata/tobccamp.htm>

National Illicit Drugs Campaign

A component of the National Illicit Drug Strategy, the National Illicit Drugs Campaign (NIDC), was launched in March 2001 as a comprehensive two-part community education and information campaign. The overarching aim of the NIDC is to prevent young people experimenting with illicit drugs. The first part of the NIDC targeted parents of 12 to 17 year olds and parents of 8 to 11 year olds in an effort to inform and encourage them to speak with their children about illicit drugs. In terms of outcomes, the NIDC aimed to generate and reinforce both attitudinal and behavioural change within this target audience.

This NIDC strategy was based upon qualitative and quantitative research involving a range of focus groups, in-depth interviews and telephone interviews with parents and other members of the general community, including a number of parents from non-English speaking backgrounds. To date, campaign activities have included two television commercials, information resources for parents (booklets and brochures), a campaign website (<http://www.drugs.health.gov.au/>), strategies to engage service providers and campaign stakeholders, and a national public relations strategy. This first part of the NIDC was subsequently evaluated through post-campaign surveys with parents, community persons (not parents of 8 to 17 year olds), young people aged 15 to 17 years, and NESB parents.

Part Two of the NIDC is intended to focus on young people and specifically youth at risk of drug use. So far, two stages of formative research have been undertaken in relation to this second phase, the first in 1999-2000 and the second in 2003. The purpose of this research was, among other things, to

explore youth attitudes towards and behaviours in relation to illicit drugs. The findings of this research will then be combined with stakeholder consultations and previous formative research findings, to inform the development of the youth phase of the NIDC. The formative research findings and evaluation reports for the National Illicit Drugs Campaign, as well as other campaign information can be accessed via the following website:

<http://www.drugs.health.gov.au/campaign.htm>

National Alcohol Campaign - drinking. Where are your choices taking you?

The National Alcohol Campaign (NAC) was launched in 2000 as one of the initiatives under the NDSF, and is now aligned under the National Alcohol Strategy that was released in 2001. Young people aged 15 to 17 years are the primary target audience of the campaign, with secondary target groups consisting of parents of 12 to 17 year olds and young adults aged 18 to 24 years. The overarching goal of the campaign is to help young people, as well as all sections of the community more broadly, to develop understanding, attitudes and behaviours that will enable them to minimise, and if possible avoid alcohol-related harm. The key message is to encourage young people to think about the choices they make about drinking alcohol and the possible negative consequences of high risk or excessive alcohol consumption.

To date, the National Alcohol Campaign has implemented three phases, the launch and two booster phases, and activities have included two television and cinema commercials – one targeting males and one targeting females, magazine and newspaper advertisements, wallet cards, a campaign website (<http://www.drinkingchoices.gov.au/>), a youth correspondent program, parent and youth-focused posters and brochures, sponsorship and branding of the 2000 Regional and National Rock Eisteddfod Television Specials, and sponsorship of the Croc Festivals in 2000 and 2002. Many campaign activities were modified to increase their cultural appropriateness for Indigenous, rural and remote, and NESB parents and youth, and media placements cover a range of Indigenous and ethnic print sources. Several states and territories also linked in with the National Alcohol Campaign by extending the national media buy and implementing local activities to support the campaign messages, and a number of business and government partnerships have been developed in association with various campaign activities.

To guide the direction of the National Alcohol Campaign, formative research involving in-depth interviews and group discussions was conducted with

teenagers, young adults, parents of teenagers, and stakeholders including teachers, police, and hotel and nightclub staff. Additionally, telephone and face-to-face surveys were conducted with 15 to 17 year olds, 18 to 24 year olds and parents of 12 to 17 year olds. The three phases of the campaign have also been evaluated in terms of its relevance, impact and reach for the target audiences. The evaluation reports and formative research findings can be accessed via the following website:

http://www.nationalalcoholcampaign.health.gov.au/research/evaluation_summary.htm

National School Drug Education Strategy

The National School Drug Education Strategy (NSDES) is funded under the education component of the National Illicit Drug Strategy and is administered by the Commonwealth Department of Education Science and Training. The overarching goal of the NSDES is 'no illicit drugs in schools' and its central aim is to prevent and reduce the demand for drugs by young people through education. The strategy employs a whole of government approach to school drug education, although responsibility for the delivery of drug education and the management of drug-related incidences in schools remains firmly with the states and territories. The target audience of the NSDES includes primary and secondary school students, teachers, parents and the school community.

At the national level, NSDES activities have included the provision of support and funding to all states and territories to develop and enhance preventative school drug education programs, the development of the National Framework for Protocols for Managing the Possession, Use and/or Distribution of Illicit and Other Unsanctioned Drugs in Schools document, a Drug Education Professional Development Package, a Parents brochure, a School Drug Education Information Project to develop an integrated set of multimedia-based products relevant to school drug education, research and development of the Innovation and Good Practice Monographs, and funding of School Community Drug Forums in all states and territories.

A partnership approach is strongly evident in the NSDES, with the development and implementation of the strategy and related activities involving a broad range of stakeholders including state and territory government and non-government education authorities, school principals, teachers, academics, health professionals, parents, Indigenous communities, related non-government

organisations and community members. Collaboration between education, health and law enforcement sectors at both the national and state levels also characterises the development and implementation of NSDES activities.

Additionally, intersectoral School Drug Education Coordinating Committees have been established in each state and territory to develop and coordinate NSDES school drug education projects and programs at the state and territory level. In general, these coordinating committees are responsible for the development and implementation of the NSDES at the state and territory level and comprise representatives from the independent schools sector, the Catholic education sector, and the government education sector in each state and territory.

Each State and Territory has utilised the funding provided by the NSDES in a different way and an overview of these different approaches is provided in Table 5.3 below.¹

Table 5.3 School drug strategies through NSDES funding

State	School Drug Strategy
ACT	The Drug Education Project for School Communities in the ACT (DEPACT) focuses on enhancing school and community partnerships and the development of whole school approaches to drug education. The framework for DEPACT came from the WA School Drug Education Project, although it was adapted to address the specific school drug education needs of ACT school communities. The following web page about DEPACT is located on the ACT Department of Education, Youth & Family Services website: http://www.decs.act.gov.au/services/drugeducation.htm
NSW	The NSW National School Drug Education Strategy (NSDES) is geared towards supporting innovative school drug education programs and parent and community involvement. The focus is on primary education, policy and practice, parent and community partnerships, lighthouse grants, information dissemination and research. The NSW National School Drug Education Strategy website was also funded under the NSDES and can be accessed at: http://www.nsdcs.nsw.edu.au/
NT	The Northern Territory (NT) School Drug Education Strategy is primarily focused on the delivery of drug education in rural/remote Aboriginal communities and support activities in the urban context. Currently there is no related website for the NT School Drug Education Strategy.
SA	The South Australian Whole School Drug Strategy (WSDS) is focused on the implementation of whole school community approaches and supporting professional development for teachers, including the development of drug education guidelines, dissemination of best practice and information programs for parents. The SA Drug Strategy website was also funded under

¹ The information contained in this table was obtained from the following website: <http://www.sofweb.vic.edu.au/wellbeing/druged/comm.htm>

State	School Drug Strategy
	the NSDES and can be accessed at: http://www.drugstrategy.central.sa.edu.au/index.html
TAS	The Tasmanian Project is focused on school and community partnerships through the establishment of school community demonstration projects and the subsequent develop of models for use by other schools. The website referring to the Tasmanian project can be accessed at: http://www.discover.tased.edu.au/drugeducation/regions/state.htm
VIC	The Victorian School Drug Education Strategy is focused on the undertaking of a number of research projects that extend and enhance activities under the Victorian Government’s Turning the Tide initiative. Research areas include effective drug education, peer drug education, responding to illicit drug use, tobacco education and Koori drug education. Information regarding the Victorian School Drug Education Strategy and the range of research projects can be obtained at: http://www.sofweb.vic.edu.au/wellbeing/druged/research.htm
WA	The Western Australian School Drug Education Project (SDEP) focuses on school and community partnerships through a School Community Grant Scheme and a School Community Transition project. The School Community Grant Scheme enables schools and communities to access funds to enhance the delivery of school drug and health education while the School Community Transition project is focused on school leavers and reducing the harms often associated with this transition period. The Western Australian School Drug Education can be accessed at: http://www.sdep.wa.edu.au/
QLD	The Queensland School Drug Education Strategy (SDES) has a strong emphasis on professional development for teachers and principals, through the development of resources and research on baseline performance data. The Queensland School Drug Education Strategy can be accessed at: http://education.qld.gov.au/health-safety/promotion/drug-education/html/reachingout.html NB: A more detailed description of the Queensland SDES is provided in section 5.3.

Overall, as a ‘prevention through education’ initiative the NSDES seeks to promote both attitudinal and behavioural changes in young people in relation to illicit drug use specifically and other licit drugs in general.

Community Partnerships Initiative

A component of the National Illicit Drug Strategy, the Community Partnerships Initiative (CPI) is a community grants program designed to encourage and support illicit drug prevention initiatives at the local community level and in particular those focusing on young people. The Community Partnerships Initiative is modelled on the WHO Global Initiative on Primary Prevention of Substance Abuse (GIPPSA), and its aims and funding criteria are drawn from both this initiative and broader literature pertaining to successful community projects.

To date, three national funding rounds totalling \$10.4 million have led to a total of 134 primary prevention projects being implemented across Australia. Projects

have ranged from peer drug education and information programs to parent training and up-skilling initiatives. A list of CPI funded projects is available at <http://www.health.gov.au/pubhlth/strateg/drugs/illicit/cpilist.htm>. Key activities for the CPI have also included the development of a Community Partnerships Kit and website (<http://www.communitypartnerships.health.gov.au/>) to assist those individuals and groups funded to implement community prevention initiatives under the CPI.

Evaluation of the first two rounds of the CPI was conducted from 2000 to 2002 and involved a literature review, review of existing documentation including background documents, six month progress and final reports for each project, and the collection and assessment of data from Key Informant interviews and on-site project visits. The final evaluation report can be accessed at <http://www.health.gov.au/pubhlth/strateg/drugs/illicit/evaluation.htm>. An overarching finding of the evaluation was that in general, the most successful projects incorporated multiple and flexible approaches (Loxley & Bolleter, 2003); however, evidence of behaviour change as a result of the projects was limited. In terms of the implications of the evaluation findings for both the CPI and community-based primary prevention initiatives in general, (Loxley & Bolleter, 2003), have identified six main messages, including the need for longer term projects to assess macro-behaviour changes and a greater support for building community capacity to increase the sustainability of project impact and outcomes.

Life Education Australia

Founded by Rev. Ted Noffs more than two decades ago, Life Education Australia (LEA) is a registered charity devoted to providing school-based drug education to Australian primary and secondary school students. LEA explicitly supports and works within the policy of harm minimisation and is partly funded by the Commonwealth Department of Education, Science and Training (DEST), although prior to 2003 this funding came from the Commonwealth Department of Health and Ageing. LEA resources and programs are developed at the national level; however, the individual State and Territory offices coordinate the marketing and implementation of LEA programs.

As a prevention initiative, Life Education Australia provides a range of school-based programs that seek to build young people's social skills and knowledge for effective decision-making, communication, negotiation, peer resistance and refusal in drug-related situations. LEA drug education programs are provided in partnership with schools, families and local communities and are delivered by

educators using Life Education’s national network of over 100 mobile/school classrooms, complemented by direct delivery in school classrooms. All programs are designed to address national and state curriculum outcomes for school drug education.

LEA resources and processes include pre-program visits, age appropriate workbooks for students, teacher manuals with additional lessons and activities for each classroom teacher, classroom teacher in-service, parent programs and community education. Other resources developed by LEA include ‘trigger’ videos, designed to prompt students to think about issues and situations rather than merely provide information in a top-down format, and four LEA websites (<http://www.drugsafe.org>), which are a major interactive drug education and prevention component of LEA. All LEA programs and resources are based on an interactive learning approach and the drug education and prevention programs use a ‘social competencies’ or ‘social influences’ approach, whereby social skills are taught and practiced in the real social settings of students, schools and families.

Life Education Australia was recently funded to develop and implement a ‘whole-of-community’ approach to drug education in two rural and remote communities and information about this initiative can be accessed via the LEA website. LEA resources and programs have not been modified or adapted to address Indigenous or culturally and linguistically diverse populations, although the cultural adaptation of resources at the school level is considered a critical component of the LEA approach. Evaluation of the LEA programs has included a national, independent evaluation of the secondary school program, where both teachers and students were surveyed for things such as knowledge retention and overall impressions of the program, and an evaluation of the primary program in South Australia only. The reports and findings from these evaluations can be obtained by contacting the national LEA office.

Australian Lions Drug Awareness Foundation

The Australian Lions Drug Awareness Foundation (ALDAF) was founded in 1984, with the aim of the foundation being to promote awareness and prevention of abuse of alcohol and other drugs. As a response to alcohol, tobacco and other drug use in young people, the objectives of the ALDAF are to promote awareness of alcohol and other drug abuse, develop education and prevention activities, participate in other campaigns that are consistent with the aim of the foundation, and to actively promote and support counselling and rehabilitation programs.

Primarily, the Australian Lions Drug Awareness Foundation's approach to drug prevention is based on the provision of licit and illicit drug information and education to children and young people, as the primary target audience, and then their parents and the broader community as a secondary target audience. In this way, a key activity of ALDAF is the development and distribution of drug education and information resources. ALDAF resources range from drug information brochures and parent drug education kits (video and booklet), to an interactive prescription drug program with a CD-Rom, teacher resource and student workbook for young people aged 11 to 14 years. The main mediums for resource distribution are primary and secondary schools throughout Australia, the general community, and Lions Clubs, with several resources designed for use within a school setting, while others have been developed for home and community settings. A list of current ALDAF resources can be obtained at <http://www.lionsclubs.org.au/ALDAF/index.htm>

Through the key informant interview it was also indicated that the development and distribution of ALDAF drug education resources involved partnerships with sectors such as the police service and other community organisations. However, it was also recognised that the development of greater linkages between the organisations and initiatives directed towards youth drug prevention would certainly be advantageous for increasing the effectiveness and integration of these approaches.

5.2.3 STATE AND TERRITORY INITIATIVES

Australian Capital Territory (ACT)

In the Australian Capital Territory (ACT), the ACT Youth Smoking Prevention Project was identified as a current population based youth drug prevention initiative.

ACT Youth Smoking Prevention Project

In June 2003, the ACT Government funded the Cancer Council ACT to implement the ACT Youth Smoking Prevention Project as an anti-smoking initiative designed to reduce the uptake of tobacco smoking among 12 to 15 year olds. The ACT Youth Smoking Prevention Project is modelled on the West Australian 'Smarter than Smoking' initiative, although tailored to reflect the specific needs, expectations and character of young people in the ACT.

The ACT Youth Smoking Prevention Project is currently in its development stage which, according to a key informant, is expected to involve three phases. Phase one involves a series of focus groups regarding several existing anti-smoking television commercials. This phase is being undertaken by the same social research company as that used for the 'Smarter than Smoking' initiative and is currently near completion. Following this will be a quantitative phase involving a survey of approximately 200 randomly selected young people regarding the same television commercials.

Phase three then involves modifying and updating the current 'Smarter than Smoking' anti-smoking curriculum resources. It was indicated that the Poison curriculum resources from the 100% IN CONTROL campaign had been considered for this phase but that the 'Smarter than Smoking' anti-smoking curriculum resources were seen to have a broader focus in terms of building resilience. Evaluation of the ACT Youth Smoking Prevention Project is then expected to begin mid 2004 and will also be undertaken by the same company as that used within the 'Smarter than Smoking' initiative.

Contact: ACT Cancer Council

Ph: (02) 6262 2222

Email: john.thorn@actcancer.org

New South Wales (NSW)

Since the NSW Drug Summit in 1999, the NSW Office of Drug Policy has been responsible for implementing the NSW Government Drug Summit Plan of Action. The Government's response to the Drug Summit in terms of prevention and young people can be viewed at http://www.drugsummit.socialchange.net.au/action_plan/index.html#two. Some of the youth-focused prevention initiatives and resources that have been developed as part of this response include a 'Drug Smart Z-Card', which provides drug information and contact details for services (see: http://www.communitybuilders.nsw.gov.au/drugs_action/zcard.html) and a Cannabis Information Campaign.

According to key informants another NSW Drug Summit was being undertaken at the time of this review, although the primary focus of this summit was alcohol abuse (see: <http://www.alcoholsummit.nsw.gov.au/>). It was proposed that a possible outcome of this summit might be the development of broader youth-

focused prevention campaigns. Key informants also indicated that a NSW youth-focused anti-tobacco campaign was being considered for implementation early in 2004.

Cannabis Information Campaign

The Cannabis Information Campaign began in late 2002 and targets young people aged 14 to 19 years. The overarching aim of the campaign is to promote discussion among young people about the social, health and other effects of cannabis use. The campaign involved the display of cannabis-related advertising posters in 15 cinemas and 9 shopping centres in metropolitan, regional and rural NSW. These posters were also distributed to all high schools and Community Drug Action Teams throughout NSW. A series of advertisements broadcast on youth radio stations across NSW then followed as the second stage of this campaign. A final campaign activity is expected to be implemented in the near future. Further information and the posters used in the campaign can be viewed at http://www.communitybuilders.nsw.gov.au/drugs_action/cann.html).

Contact: NSW Premier's Department
Ph: (02) 9228 5013
Email: webkeeper@communitybuilders.nsw.gov.au

Northern Territory (NT)

In the Northern Territory (NT) youth drug prevention is currently addressed primarily through localised, population specific (Indigenous, rural and remote etc) education-orientated initiatives, with the Department of Health and Community Services, Northern Territory, and in particular the Alcohol and Other Drugs Program providing the coordination and management of these initiatives.

The Alcohol and Other Drugs Program of NT provides a range of strategies to address the harms associated with licit and illicit substance use, with a number of these strategies incorporating aspects of youth drug prevention. Access to existing and past campaigns and initiatives related to youth drug prevention in the NT is available via the Department of Health and Community Services, Alcohol and Other Drugs Program website (<http://www.nt.gov.au/health/healthdev/aodp.shtml>)

Contact: Department of Health and Community Services
Ph: (08) 8999 2400

South Australia (SA)

In South Australia (SA), two youth-focused drug prevention initiatives were identified - Quit SA and Alcohol. Go Easy.

Quit SA

Prevention constitutes a major program area of Quit SA, with the principal focus being to encourage young people to be non-smokers through a range of awareness raising activities as well as professional development and the provision of resources for educators and others working at a level of influence with young people. Additionally, prevention activities involve the support of tobacco control legislation and the promotion of smoke-free environments within the community, including areas where young people meet.

Quit SA also implements smoking prevention activities specifically for schools and young people, which include the use of the Western Australian 'Smarter than Smoking' message, peer support program activities for tobacco and smoking, the development of the Smoke-free education and childcare guidelines, and the OxyGen website, which was developed in collaboration with Quit Victoria and Smarter than Smoking WA. The OxyGen website is aimed at young people, teachers and parents, and provides a range of anti-tobacco information and resources (see: <http://www.oxygen.org.au/>). Although the Smarter than Smoking campaign primarily targets 10 to 15 year olds, a specific age bracket for 'young people' is not made explicit within Quit SA material. The Quit SA website address is: <http://www.cancersa.org.au/i-cms?page=1.6.36&banner=1.6.36.487>

Contact: Quit SA

Ph: (08) 8291 4141

Email: dasc@saugov.sa.gov.au

Alcohol. Go Easy

Alcohol. Go Easy is an alcohol-focused harm reduction campaign that seeks to address the responsible provision and consumption of alcohol within specific settings. The Alcohol. Go Easy campaign is led by the Drug and Alcohol Services Council of South Australia and began in 1998-99. Young People, along with liquor licensees and sport, recreation and arts settings, constitute the primary target groups for the campaign and the age bracket for young people varies depending on specific campaign activities. The primary campaign strategy is to establish links with sports, arts and recreational agencies and then encourage

and support these organisations to create environments that foster responsible alcohol service and consumption, educate patrons about the harms associated with alcohol, and to promote the Alcohol. Go Easy message. To assist organisations achieve this goal the Alcohol. Go Easy campaign has developed the 'How to Introduce an Alcohol policy' booklet.

Evaluation of the campaign has involved formative evaluation to ascertain the importance of the message as well as an ongoing campaign evaluation that was undertaken in 2001. This evaluation was intended to measure the impact of the campaign strategies on the agencies involved and the reach of the campaign message. Although not solely a youth-focused prevention campaign, Alcohol. Go Easy does aim to reduce alcohol consumption as a method for reducing alcohol related harm in all populations, including young people participating in sport, arts and recreational settings. A more detailed overview of the Alcohol. Go Easy campaign can be obtained at:

http://www.dasc.sa.gov.au/site/page.cfm?site_page_id=79

Contact: Drug and Alcohol Services Council

Ph: (08) 8274 3333

Email: dasc@saugov.sa.gov.au

Tasmania (TAS)

Although no large-scale youth drug prevention campaigns were identified as currently being implemented in Tasmania, Quit Tasmania does produce an annual newsletter, Outspoken, as a youth smoking prevention initiative, while the Department of Health and Human Services, Tasmania, undertakes a range of health promotion activities to raise the awareness of alcohol and drug issues.

Outspoken

Outspoken is an annual youth newsletter produced by Quit Tasmania as a youth smoking prevention initiative. The newsletter contains information about anti-tobacco initiatives and events throughout Tasmania, such as National Youth Tobacco-Free Day activities, and general information about tobacco and the health and social effects of smoking. The newsletter is distributed to all primary and secondary schools and colleges and is also posted on the Quit Tasmania website. A copy of Outspoken can be obtained from the Quit Tasmania website (<http://www.quittas.org.au/>) under the link for Youth Newsletters.

In addition to Outspoken, a key informant from Quit Tasmania stated that other smoking prevention activities include the provision of information to schools and parents, primarily on an ad hoc basis, and promotion and involvement in the Rock Eisteddfod in Tasmania. It was indicated that a proportion of the smoking resources and information provided to schools and parents was drawn from the Smarter than Smoking Project, while links to the 100% IN CONTROL campaign was primarily through the Rock Eisteddfod.

Victoria (VIC)

In Victoria, two current youth drug prevention campaigns were identified: the Youth Alcohol Campaign and the Victorian Tertiary Students Alcohol Campaign.

Youth Alcohol Campaign and the Victorian Tertiary Students Alcohol Campaign

Both the Youth Alcohol Campaign and the Victorian Tertiary Students Alcohol Campaign were launched as key initiatives of the Victorian Alcohol Strategy and share the tag line 'Is getting pissed getting pathetic?' The campaigns are administered by the Victorian Health Department and are currently in the process of being evaluated in terms of reach and impact on young people's attitudes towards alcohol. Although tailored to different audiences, both campaigns aimed to increase awareness of the negative effects of drinking, influence the behaviour, decisions and attitudes of young people with regards to alcohol in order to reduce excessive drinking, minimise alcohol-related harms and increase awareness of the available services and treatment options. Information about the two campaigns as well as other alcohol related information was also provided via the website: <http://www.alcohol.vic.gov.au/>.

The Youth Alcohol Campaign was launched in August 2003 and targets young people aged 14 to 15 years, although it was also considered relevant to 13 to 14 year olds who were seen to be approaching the time when they would be confronting the issue of alcohol. The campaign comprises an advertisement for television, cinemas, radio and the Internet. Television and cinema advertising ran for 13 weeks while the radio campaign spanned ten weeks.

The Victorian Tertiary Students Alcohol Campaign is an advertising and awareness raising campaign targeting tertiary students aged 18 to 21, who are studying at either a university or TAFE institution. The campaign was launched in July 2003 and involved the distribution of direct language (words only) advertisements in bathrooms/toilets, at bus stops and the local pubs and bars in

and around Victoria's tertiary institutions and TAFE campuses. The use of direct language advertisements was based on formative research involving young people, where it was generally asserted that direct language would be more hard-hitting than using images. The Victorian Tertiary Students Alcohol Campaign is being implemented over a six-month period and it was indicated that the evaluation of this campaign may attempt to measure changes in alcohol consumption patterns. However, being the first campaign of its type in Victoria it was recognised that significant behaviour changes towards alcohol were not expected in this evaluation.

Contact: Drug Policy and Services Branch

Ph: (03) 9637 5238

Email: drugs@dhs.vic.gov.au

Western Australia (WA)

In Western Australia, three current youth drug prevention campaigns were identified – Drug Aware, Smarter than Smoking, and YOH Fest.

Drug Aware

The Drug Aware Program was established in 1996 as a state-wide public education program designed to address illicit drug use in Western Australian youths. The Program is an initiative of the Drug and Alcohol Office (Western Australia) and the primary target group is young people aged 14 to 24 years, with parents/care-givers of 12 to 17 years olds being the secondary target audience. The overarching aims of the Drug Aware Program is to prevent or delay the onset of illicit drug use and reduce the harm associated with illicit drugs through a range of measures.

In its early stages the Drug Aware Program focused largely on a social marketing approach; however, it has since expanded to include interactive community-based initiatives to complement the campaign-based strategies. To date, social marketing campaigns have included a Parent Campaign, Heroin Prevention Campaign, Psychostimulant Campaign and Marijuana Campaign. In addition, complimentary community driven projects have included the Youth Illicit Drug Education Project, Pharmacy Project, Tertiary Partnerships Project, Night Venues Project, Youth Drug Driving Project, and the Youth Illicit Drug Education Project. Numerous associated resources have also been developed, including the Drug Aware website (<http://www1.drugaware.com.au/>), posters, booklets and

information kits, and fact sheets for students, professionals and the general community. The Program also has a Drug Aware Competition Wheel strategy, which was adapted from the 100% IN CONTROL Competition Wheel strategy, and is used state-wide at community-based events supported by the Drug Aware Program.

Several Drug Aware campaigns and projects have been evaluated and although, like all prevention campaigns, determination of the program's effectiveness against its aims and objectives is difficult to measure, the program has been shown to have achieved a high level of reach and message take-out.

Consultations with young people also form part of the planning, development and implementation stages of Drug Aware campaigns and projects, and feedback from young people regarding the merchandise, media concepts, training sessions, resources, publications, and overall campaign strategies is regularly sought.

Contact: Health Promotion Officer
Prevention Branch, Drug and Alcohol Office
Ph: (08) 9370 0358

Email: dao.prevention@health.wa.gov.au

Smarter than Smoking

Western Australia's Smarter than Smoking Project began in 1995 as a joint initiative of several leading WA health agencies, including the Heart, Asthma and Cancer Foundations, the Australian Council on Smoking and Health, the Department of Health's Quit WA program, the School Drug Education Project, Curtin University's WA Centre for Health Promotion Research, and the Health Promotion Evaluation Unit at the University of WA. To date, the project has received three rounds of three year funding from Healthway (Western Australian Health Promotion Foundation) and it is managed by a Reference Group comprised of representatives from the above agencies.

Overall, the WA Smarter than Smoking project aims to prevent and reduce smoking in young people aged 10 to 15 years and to increase the number of 12 to 17 year olds who have never smoked. The project employs a comprehensive mix of strategies, which are similar in type to those used within the 100% IN CONTROL campaign, and has been used as a model for several other state and territory youth anti-smoking initiatives. Strategies include mass- and multimedia campaigns, promotion of the 'Smarter than Smoking' message through

sponsored groups, school-based education programs, youth-orientated publications and merchandise, extensive research with young people, and advocacy. The project has also contributed to the development of the OxyGen website (<http://www.oxygen.org.au/>), in collaboration with Quit SA and Quit Victoria, and undertaken competitions through mobile phone SMS communication and advertising via websites such as hotmail. The Smarter than Smoking Ideas Kit for Upper Primary Teachers and a range of other Smarter than Smoking fact sheets can be viewed via the OxyGen website.

Young people were consulted throughout the planning and implementation stages of the campaign and formative research was conducted with young people to identify their attitudes towards smoking and towards peers who smoked. The project also has a Youth Committee, which is made up of 12 young people in the target age group, who provide feedback on Smarter than Smoking campaign strategies, communication messages and merchandise.

Additionally, Smarter than Smoking incorporates an evaluation program that is independently monitored by the Health Promotion Evaluation Unit, School of Population Health, University of Western Australia. Prior to the first advertising campaign a baseline survey of young people was undertaken and surveys have since been conducted after each wave of television advertising. The surveys are intended to measure campaign reach and impact, as well as collect data on young people's attitudes, beliefs, intentions, and behaviour with regards to smoking. Results from these evaluations have been encouraging in terms of the reach of campaign message within the target audience and some early evidence of an increase in the number of young people who have never smoked and a decrease in the proportion of 11 to 16 years olds who reported smoking.

Contact: Project Coordinator, Smarter than Smoking
Ph:(08) 9388 3343

Email: smart@heartfoundation.com.au

YOH Fest

Although YOH Fest is not strictly a drug prevention campaign, it was determined that its similarity to the 100% IN CONTROL Rock Eisteddfod and Croc Festival campaign activities meant that it warranted a mention within this review. YOH Fest began in 1998 and is an annual theatre festival that aims to build the knowledge, attitudes and skills of young people in relation to health issues

impacting upon them. The festival is open to all high schools within Western Australia and each year a health-related theme is used to guide the development of the performance pieces, with past themes including HIV/AIDS, Youth Suicide and Alcohol Use, Bullying, and Mental Health. The theme for 2003 was Try Hugs Not Drugs and Smarter than Smoking, and performances were to include the Smarter than Smoking message as well as focusing on a range of issues relating to illicit and licit drugs. A website for YOH Fest has recently been developed and further information about the festival can be accessed at:

<http://www.yohfest.com.au/>

5.2.4 KEY SUMMARY POINTS

Of the 17 national and interstate youth drug prevention campaigns and initiatives identified in this review², four addressed both licit and illicit drugs, four focused on illicit drugs – though one these was specific to cannabis only, four targeted tobacco, and four sought to address alcohol.

With regard to young people as the primary target group, the lowest specified target age of initiatives was 10 years (Smarter than Smoking Project), and the most consistent upper age limit was 17 years or the end of secondary school. In two campaigns, (Quit SA and Alcohol. Go Easy), a specific age bracket for 'young people' was not identified.

In the Northern Territory and Tasmania, no ongoing, population-based drug prevention initiatives for young people were identified; however, key informants from all three areas indicated that a range of localised, youth drug prevention initiatives were being developed and coordinated by the relevant health departments.

Indigenous peoples were involved in the formative research stage of two initiatives (NTC and NSDES), while only one campaign (NAC) modified its campaign activities, resources and distribution processes to specifically address Aboriginal and Torres Strait Islander peoples.

Two campaigns (NTC and NIDC) involved people from culturally and linguistically diverse backgrounds in the formative research phase, while again only the NAC

² For the purposes of this review the Outspoken newsletter by Quit Tasmania has not been counted as a youth drug prevention initiative.

modified its activities, resources and distribution processes to specifically accommodate this population.

Of the 17 identified drug prevention initiatives, only the National Alcohol Campaign and the Life Education Australia organisation directly addressed rural and remote populations in their activities.

The most common settings targeted by initiatives were home and recreational environments, through the use of mass- and multimedia mediums such as television, cinema, radio, and the Internet. The school was the next most common setting to be targeted by initiatives, and this was largely via curriculum resource development, the provision of drug information to teachers, and the involvement of schools in drug prevention events and activities such as YOH Fest.

Ten of the 17 drug prevention initiatives identified had undertaken formative research during the development and implementation stages, while four others (Community Partnerships Initiative, LEA, ALDAF, and the Cannabis Information Campaign) were based on, or based their resources upon, relevant research literature.

5.3 OVERVIEW OF COMPLEMENTARY QUEENSLAND INITIATIVES RELEVANT TO TOBACCO, ALCOHOL AND ILLICIT DRUG USE AMONGST YOUNG PEOPLE

This section provides the findings of the review of complementary Queensland initiatives relevant to tobacco, alcohol and illicit drug use. The methodology guiding the review was to document current Queensland population-based alcohol, tobacco and other drug primary prevention initiatives targeting young people up to 25 years. We do acknowledge that there is a multitude of secondary prevention campaigns and localised primary prevention projects targeting young people within Queensland; however, for the purposes of this review these initiatives were not directly addressed. Yet, through the review process many secondary and localised primary prevention projects were identified and websites listing some of these campaigns are supplied below:

<http://www.generate.qld.gov.au/index.cfm?itemid=278>

<http://www.families.qld.gov.au/youth/dev/index.html>

<http://www.police.qld.gov.au/pr/program/partySafe/index.shtml>

<http://www.youth.qld.gov.au/>

5.3.1 OVERVIEW AND METHOD

Overall, four complementary Queensland initiatives relevant to the prevention of tobacco, alcohol and illicit drug use in young people were identified through this review. The method used to document these involved a process of identifying the initiatives and the appropriate contact person, arranging and conducting telephone interviews with each identified contact, and collating the information collected through the interviews and other sources such as websites, brochures and relevant documents. Initiatives and key contacts were identified through liaison with relevant Queensland Government departments, personal workplace contacts, extensive web searches, and snowballing, whereby interviewees and those contacted during the preliminary investigation stage were also asked about other Queensland initiatives that fit the review methodology.

During this investigation stage, an explanation of the purpose of the interview within the overall context of the 100% IN CONTROL review was provided to each individual contacted and a copy of the interview questions and a brief project overview was emailed to scheduled interviewees. The questions used to guide each interview were designed to gather information regarding: (i) the target group and history of the initiative, (ii) the overarching goal, objectives and key activities of the initiative, (iii) whether any evaluation activities had been conducted and if it was possible to access this data, (iv) the extent to which the initiative linked in with the 100% IN CONTROL campaign and the major benefits arising from this linkage, and (v) any other general comments or suggestions.

Telephone interviews were conducted with a total of seven key contacts and relevant documents and resources identified through the interviews were obtained from the key contact and/or via an identified website. A summary of each identified complementary Queensland initiatives relevant to tobacco, alcohol and illicit drug use in young people is provided below. The central themes and issues arising from the documentation of these initiatives are then synthesised in the 'Key Summary Points' section.

5.3.2 KEY QUEENSLAND INITIATIVES

Queensland School Drug Education Strategy

The Queensland School Drug Education Strategy is a collaborative initiative between Education Queensland, the Queensland Catholic Education

Commission and the Association of Independent Schools of Queensland Inc. The initiative began in 1999 and is funded by the Commonwealth, under the National School Drug Education Strategy.

The overarching goal of the Queensland School Drug Education Strategy initiative is to strengthen schools' responses to drug-related issues through a program of activities in three priority areas: curriculum, policy and procedures, and community engagement. The primary target group for the initiative is teachers and school administrators and to a lesser extent parents and the community, and the secondary target group is the students attending secondary schools within Queensland. The objectives of the Queensland School Drug Education Strategy initiative are consistent with the eight objectives contained within the National School Drug Education Strategy (see <http://www.det.qa.gov.au/archive/schools/publications/1999/strategy.htm>).

A number of key activities have been undertaken within the initiative including the development of a Professional Development (PD) package for teachers, the provision of PD to teachers, an Action Research Project, the School Drug Summits project, the development of a drug education website located on the Education Queensland website (see: <http://education.qld.gov.au/health-safety/promotion/drug-education/>), newsletters and various other drug education resources for schools.

Several activities undertaken in the Queensland School Drug Education Strategy initiative have been subject to evaluation. According to key informants all professional development activities are internally evaluated while each School Drug Summit is evaluated by the school conducting the event. The evaluation data obtained from these evaluation activities is not publicly available and was not able to be obtained for the purposes of this review. Key informants also indicated that it is expected that an external evaluation of the overall Queensland School Drug Education Strategy will be undertaken at the completion of the initiative.

Responsible agency: Education Queensland, the Queensland Catholic Education Commission and the Association of Independent Schools of Queensland Inc.

Coverage: State-wide.

Target Group: Teachers and School Administrators of Queensland Secondary Schools.

Contact: Project Officer
Curriculum Strategy Branch
Education Queensland
Ph: (07) 3360 7509

Natural High Alternative

Natural High Alternative is a youth-focused alcohol, tobacco and illicit drug prevention campaign developed and led by the Alcohol and Drug Foundation, Queensland. The campaign first began in 1999 and covers Southeast Queensland and Townsville and is currently in the process of building network partnerships with a number of organisations in the northern New South Wales area. The primary target group for the Natural High Alternative campaign is young people aged between 12 and 25 years and the overarching goal of the campaign is encourage young people's participation in and membership to organisations which offer natural high alternatives such as sporting and community organisations and youth groups.

Primarily, the campaign seeks to meet this goal by promoting, marketing and acting as a 'broker' between the organisations that provide natural high alternatives for young people and the target audience of the campaign. Over 900 organisations offering natural high alternatives are promoted by the campaign through various marketing strategies and events; however, there is also a process of endorsement for organisations that adopt the Natural High Alternative code of practice. The campaign then seeks to work closely with these organisations to build their capacity to provide youth-focused natural high alternatives and to increase their sustainability within the leisure market.

In addition to the promotion of organisations at event such as the EKKA and Schoolies Week, there are also a number of key activities led by the Natural High Alternative campaign. These include the Big Night Out (an annual event where young people participate in an all-night program that covers six venues and where supervision and transport between venues is provided), the Mega Rush (an annual end-of-year event that involves the hiring of a venue such as Dreamworld and holding a ticketed event for young people to attend) a Natural High Alternative website (with information about events, participating organisations and relevant contact details of crisis support, counselling and local drug-related services) see: <http://naturalhigh.org/>, and an email newsletter for young people.

The Natural High Alternative campaign has also been engaged in a few targeted projects, for example working with young mothers to explore natural high alternatives and with Alcohol, Tobacco and Other Drug (ATOD) frontline services; however, key informants indicated that the primary focus of the campaign is to target the whole population of young people. In this way, the Natural High Alternative campaign is synonymous with the population-based approach of 100% IN CONTROL and it was identified that the development of stronger linkages between these campaigns could be mutually beneficial in the primary prevention of alcohol, tobacco and illicit drug use in young people in Queensland.

According to key informants, evaluation is built into most events and activities. This evaluation primarily involves surveys and focus groups for participants and measures things such as their understanding of the campaign message, where they heard about the campaign, and how satisfied they were with the activity or event. The information obtained through this evaluation process is then retained by the Natural High Alternative campaign team; however, it has not as yet been collated or analysed within a comprehensive evaluation framework.

Responsible agency: Alcohol and Drug Foundation, Queensland

Coverage: Southeast Queensland, Townsville and northern New South Wales

Target Group: Youth aged 12 to 25 years

Contact: Project Officer
Alcohol and Drug Foundation – Queensland
Ph: (07) 3832 3798

Me, Mates and Moderation

Me, Mates and Moderation is an alcohol, tobacco and illicit drug prevention and education program aimed at schools with secondary students. The program was developed by the Darling Downs Public Health Unit, in collaboration with the Alcohol, Tobacco and Other Drug Service, the Southern Downs Health Service District School Based Youth Health Nurse Program and Pittsworth State High School. It is modelled upon the Health Promoting Schools framework and contemporary best practice in drug education. After initial piloting of the program in 2000-01, the Me, Mates and Moderation program was rolled out across the State by Queensland Health, in collaboration with Education Queensland.

The overarching goal of the Me, Mates and Moderation program is to promote informed and responsible use of alcohol, tobacco and other drugs in young people. Although primarily packaged as a drug education resource for schools, Me, Mates and Moderation strongly emphasises the process element of drug prevention and encourages schools to adapt the program to suit the local context in which it is to be implemented. The objectives of the program are consistent with the practice principles of the Health Promoting Schools model. The key components of Me, Mates and Moderation include a Teacher Inservice Program, an Implementation Guide for teachers, a curriculum-based Teaching Resource, a Peer Education program, and the Danger Game, which is used in conjunction with the teaching strategies to provide students with the opportunity to explore harm minimisation issues.

Other activities around the Me, Mates and Moderation program include promotion of the program workshops and resources to schools and at national and international health-related conferences. The program is closely aligned with the 100% IN CONTROL campaign, with 100% IN CONTROL resources and activities being used to complement the program in schools. Several of the Me, Mates and Moderation program components and the Resource Order Form are located on the 100% IN CONTROL website (see <http://www.100incontrol.com/matesandmod.htm>).

Evaluation of the Me, Mates and Moderation program has included the internal evaluation of the pilot program (not publicly available) and an independent evaluation conducted by the Department of Education, Science and Training in 2002, as part of the National School Drug Education Innovation and Good Practice Project. This Commonwealth funded project resulted in a series of eight monographs identifying successful approaches to drug education and areas for improvement (see <http://www.redi.gov.au/Search/ViewResource.asp?rid=575>).

A separate evaluation report was also developed specifically for the Me, Mates and Moderation program. Additionally, it was noted that the development of a framework for evaluation of the implementation process of the Me, Mates and Moderation program in schools was currently in the final stages of completion.

Responsible agency: Queensland Health and Education Queensland

Coverage: State wide

Target Group: Schools with secondary students

Contact: Project Coordinator
Darling Downs Public Health Unit
Ph: (07) 4631 9808

KickStart AFL Program

The KickStart AFL Program is a health promotion, drug and alcohol prevention initiative designed purely for the youth of the remote Indigenous communities in Northern Australia and in particular Far North Queensland. The initiative was first implemented in 1997 as an event-based Australian Football League (AFL) promotion campaign; however, in 1999 the campaign developed a broader focus after the KickStart Coordinator and an Indigenous Development Officer conducted extensive consultations with Indigenous communities throughout the Cape region.

The overarching goal and mission statement of the KickStart program is to enhance the life skills of Indigenous Australians and increase participation in sport through the AFL game. AFL is the medium through which the KickStart program provides information, assistance and opportunities to Indigenous youth in remote communities. Working within a harm minimisation framework, the KickStart initiative aims to promote healthy lifestyles, reduce early uptake of drug and alcohol use, and improve the attitudes and participation of young Indigenous persons. The primary target group of the KickStart campaign is young Indigenous people aged 5 to 15 years (both boys and girls), although aspects of the program do cater for Indigenous youths up to 17 years.

Program activities include school clinics, promotions, the development of a website link (located on the AFL Queensland website, see <http://footyinthenorth.aflq.com.au/>), AFL camps and competitions and building partnerships with school and local councils to help provide resources and facilities to remote communities. In Far North Queensland, a key activity of the KickStart initiative is the highly successful Crusader Cup program. This program was developed to provide both a pathway for identified 10 and 11 year old Indigenous youths to participate in the Crusaders representative teams (which were developed through the KickStart initiative), and a structured program through which to focus health promotion and education activities. Eligibility to the Crusaders Cup program is determined by four main criteria which are, in order of priority: attendance at school at least three days per week, no involvement in any substance abuse activity, no recent history of violence, including domestic

violence, within the Community and school for which they are responsible, and lastly AFL skills.

Key informants indicated that the KickStart program tries to link in very closely with the message, branding and resources of the 100% IN CONTROL campaign, with the Crusaders uniforms bearing the 100% IN CONTROL logo and the 100% IN CONTROL water bottles and bucket hats being used by players, coaches and program coordinators alike. To date, no KickStart program activities have been evaluated although anecdotal evidence provided by the key informant suggests that the initiative has had a strong impact on the young people of many remote Indigenous communities in Far North Queensland.

Responsible agency: AFL Queensland

Coverage: Remote Indigenous communities throughout Far North Queensland

Target Group: Indigenous Youth aged 5 to 15 years

Contact: KickStart Coordinator
AFL Queensland
Ph: (07) 4033 7935

5.3.3 KEY SUMMARY POINTS

All four identified Queensland prevention initiatives address both licit and illicit drug use in young people.

Of the four initiatives, the youngest age group targeted was 5 years (KickStart AFL Program) and the oldest age group was 25 years (Natural High Alternative).

The KickStart AFL Program was the only Queensland initiative that specifically addressed Indigenous peoples and, moreover, particularly addressed the young people from possibly the remotest Indigenous communities within Queensland.

Two discrete settings were addressed by the four identified campaigns, with the Queensland School Drug Education Strategy and the Me, Mates and Moderation program targeting a secondary school setting, and the Natural High Alternative initiative and the KickStart AFL Program being delivered through a recreational/sporting setting.

Formative evaluation was undertaken for both the Queensland School Drug Education Strategy and the Me, Mates and Moderation program, while outcome

evaluation has been undertaken for these two initiatives as well as the Natural High Alternative initiative.

None of the four Queensland initiatives employed a social marketing approach to youth drug prevention. The Queensland School Drug Education Strategy and the Me, Mates and Moderation program used education as the medium for drug prevention, while the Natural High Alternative initiative and the KickStart AFL Program used a participation/engagement approach to build young people's skills and resilience, and influence attitudinal and behavioural changes towards licit and illicit drug use.

In terms of linkages with the 100% IN CONTROL Campaign, three of the four Queensland initiatives indicated that they already drew upon the 100% IN CONTROL message and resources to varying extents and some indicated a desire to develop stronger linkages with the campaign.

Key informants also highlighted the lack of collaboration between the many initiatives and projects across Queensland, and the negative impact of this situation on effective resource alignment and the provision of an integrated and comprehensive youth drug prevention approach. It is at this level then that the Queensland Government, and in particular Queensland Health, can take a lead role in developing the necessary partnerships and linkages between youth drug prevention initiatives in Queensland.

6. BEST PRACTICE IN PREVENTION OF TOBACCO, ALCOHOL AND ILLICIT DRUG USE AMONGST YOUNG PEOPLE: A REVIEW OF THE EVIDENCE

6.1 BACKGROUND AND SCOPE

A systematic literature review of health promotion approaches for alcohol, tobacco and other drug use in young people was conducted to identify efficacious approaches and good practice principles. In line with the approach described in the review tender the review focused on identifying the most recent efficacious approaches to health promotion for young people, using the most methodologically rigorous evidence available. The decision not to attempt a quantitative synthesis of study results was determined by an a priori assessment of the large number of sources of heterogeneity amongst the studies likely to be eligible. A detailed description of the review strategy is presented below.

6.2 METHODS

The steps undertaken in this review were guided by methods recommended in the National Health and Medical Research Council (NHMRC) handbook (National Health and Medical Research Council, 2000) The steps were:

- Developing questions to be addressed by the review
- Finding relevant studies
- Appraising and selecting studies
- Summarising and synthesising studies.

Details of each step as applied to this review are summarised below.

STEP 1: FORMULATION OF RESEARCH QUESTIONS

Specific research questions were developed to guide the search strategy and contribute to the review objectives. These questions were:

- Which approaches to health promotion for young people are effective in preventing the uptake of tobacco, alcohol and illicit drug use in young people?

- Which approaches to health promotion for young people are effective in delaying the uptake of tobacco, alcohol and illicit drug use in young people?
- Which approaches to health promotion for young people are effective in minimising the harm associated with the use of tobacco, alcohol and illicit drugs by young people?

STEP 2: SEARCH FOR EVIDENCE

The searches that underpin this literature review were conducted between May and July 2003. The search strategy methodology was informed by consideration of the procedures recommended by:

- The NHMRC guidelines for systematic reviews of scientific literature (National Health and Medical Research Council, 2000);
- The guidelines suggested by (Glasziou, Irwig, Bain, & Colditz, 2001) for conducting reviews in health care; and
- Examples of review methodology and search strategies in relevant published papers.

Search parameters

In order to provide an authoritative and up-to-date evidence base, relevant reviews from the Cochrane Collaboration, an organisation that applies rigorous scientific standards to their systematic reviewing process of the international literature, were identified. Due to the limited timeframe, this review deliberately avoided retrieving and reviewing specific primary studies already included in the systematic literature reviews undertaken by the Cochrane Collaboration. However, the reviews themselves have been sourced and included within the review process. These reviews have also been supplemented with published systematic reviews other than those from the Cochrane Collaboration. In addition, primary studies were also included where reviews proved insufficient.

Broad search parameters were:

- Randomised controlled trials (RCTs) or previously conducted systematic reviews of RCTs (based on empirical and epidemiological evidence);
- Recent (1997– present) studies not considered by the Cochrane reviews;

- National and international published research, with specific emphasis on identifying studies conducted in an Australian context;
- Studies investigating delayed onset or prevention approaches; and
- Participants ranging in age from childhood through to 25 years (with the majority of studies on young people under 18 years).

Due to criteria of access and timeliness, searches were restricted to:

- English language publications; and
- Journal publications.

Databases

Relevant Databases in the area of health promotion approaches for alcohol, tobacco and other drug use were identified through previously conducted systematic reviews, and a library catalogue search of electronic databases. The following databases (in order of relevance) were identified as possible sources of studies: Cochrane library, DARE – Database of Abstracts of Reviews of Effectiveness, Medline, APAIS-Health – Australian Public Affairs Information Service-Health, ATSIhealth – Aboriginal and Torres Strait Islander Health Bibliography, PsychINFO, EMBASE, CINHALL – Cumulative Index to Nursing and Allied Health Literature, Current Contents Connect, ERIC – Education Database, NIAA – Alcohol and Alcohol Problems Science Database (ETOH), AMI, CHID – Combined Health Information Database, DRUG, HEAPS, and Web of Science.

Initial searches were conducted on the Cochrane Collaboration and DARE libraries. Supplementary searches were commenced on additional databases. As searching progressed it became apparent that there was overlap between many of the databases. Therefore, when saturation occurred searching ceased and only the databases listed below were used:

- MEDLINE – to identify studies that may not have appeared in Cochrane and DARE;
- PsychINFO – to identify studies that may not have appeared in MEDLINE;
- APAIS-Health – to ensure identification of relevant Australian research; and
- ATSIhealth – to ensure identification of specific Indigenous research.

Key words

Key words for the searches were based on:

- Key words used in other previously conducted systematic reviews in the area of health promotion approaches for alcohol, tobacco and other drug use;
- MeSH subject headings; and
- Examination of the 100% IN CONTROL tender brief and the goal and objectives of the review.

Table 6.1 outlines the databases and corresponding key words used.

Table 6.1: Key words used in database searches

Search Term	Databases					
	Cochrane	DARE	MEDLINE	PsychINFO	APAIS-Health	ATSI health
Population						
Youth*	✓	✓	✓	✓	✓	✓
Adolescen*	✓	✓	✓	✓	✓	✓
Teenage	✓	✓	x	✓	✓	✓
Young people	✓	✓	✓	x	✓	✓
Substance						
Alcohol	✓	✓	✓	✓	✓	✓
Tobacco	x	✓	✓	x	✓	✓
Smok*	x	✓	✓	x	✓	✓
Drug	✓	✓	✓	x	✓	✓
Illicit	✓	✓	✓	x	x	✓
Substance	✓	✓	✓	x	x	✓
Use	✓	x	x	x	x	x
Intervention						
Prevent*	✓	✓	✓	✓	✓	✓
Study design						
Random*	x	x	✓	✓	✓	✓

x = term included in searches

✓ = term not included in searches

Search results

Following identification of potential papers for inclusion in the review via the key word searches, a two-stage process was used to determine the final papers for inclusion in the review.

Stage 1: The searches were further refined based on appraisal of the title of the paper for concurrence with the brief for this literature review. Studies that at first glance appeared appropriate were imported into an Endnote library, and studies that did not meet the review criteria were excluded. Where the relevance of a paper was uncertain, abstracts and then full copies of articles were obtained to assess suitability for inclusion.

Table 6.2 indicates the numbers of papers selected from each database as being prima facie relevant for consideration. As is to be expected, there was considerable duplication of articles across the various databases searched. The figures in Table 6.2 include these duplicates.

Table 6.2: Search results

Database	Cochrane	DARE	MEDLINE	PsychINFO	APAIS-Health	ATSIhealth
Number of papers identified through initial key word search	499	202	1320	73	56	1

Stage 2: Once searching had ceased and Endnote libraries were complete, duplicates were removed and previously conducted systematic review articles were obtained and examined. Studies included in the reviews were removed from the Endnote library to avoid duplication of findings. This resulted in identification of 124 potential primary studies for inclusion in the review. Hardcopies of abstracts of remaining articles were then obtained and were independently assessed for inclusion by two researchers. This reduced the number of potential systematic reviews to nine and primary studies to 27. Hardcopies of the studies deemed appropriate were then obtained and again assessed by two researchers, resulting in the exclusion of a further five systematic reviews and four primary studies that did not meet the review criteria. The systematic reviews were excluded either because the review focused on brief intervention approaches rather than prevention strategies (i.e. motivational interviewing, smoking cessation programs) or because the authors had published a more recent review of the same topic. The primary studies were excluded either because they were not a randomised controlled trial, the same study had been reported in a different journal, or the study focused on brief intervention rather than prevention approaches. Of the 2151 articles originally identified, the final number of Cochrane systematic reviews was five, with four non-Cochrane systematic reviews and 27 primary studies.

STEP 3: APPRAISAL AND SELECTION OF EVIDENCE

The appraisal strategy methodology for evaluating the quality of the systematic reviews identified through the literature search was informed by consideration of the procedures recommended by (Oxman, 1994) and (Rehm, 1999). Reviews were excluded where they relied on expert views and provided no attempt to systematically appraise empirical research. According to their fit with the criteria outlined above, reviews were appraised and excluded if they met less than 4 of the 6 following criteria:

1. A focused and clearly formulated problem.
2. A clear description of the search methods.
3. Reporting of inclusion and exclusion criteria and bias in selecting studies avoided.
4. Quality of studies included is assessed with stated criteria.
5. An appropriate combination of study findings based on reported criteria (i.e. the studies are grouped appropriately etc).
6. Conclusions flow from the evidence and are linked to the strength of the evidence.

Individual primary studies identified for inclusion in the review were summarised and assessed according to guidelines suggested by (Peersman, Oakley, Oliver, & Thomas, 1996). This was further informed by the work of (Harden, Weston, & Oakley, 1999). According to their fit with the criteria outlined above, primary studies were appraised and included if they met the core criteria of:

- Use of random allocation to the different groups;
- Provision of pre-intervention data for all participants in each group;
- Provision of post-intervention data for each group; and
- Findings reported for each outcome measure indicated in the aims of the study.

Data on the key reviews and additional recent studies was extracted by one researcher and an audit of 20% of the papers was undertaken by a second researcher to ensure accuracy of the data extraction. The two reviewers' data extractions were compared and any disagreements were resolved through discussion.

STEP 4: SUMMARY AND SYNTHESIS OF EVIDENCE

Key existing systematic reviews provided the basis for synthesis of evidence. The findings of these key reviews and the more recent studies identified are presented. Studies published prior to the key reviews are not re-visited as they have been assessed as part of the key reviews. The key reviews and more recent studies were examined in terms of quality, relevance, strength of evidence and generalisability to the contemporary Australian setting, with a focus on identifying efficacious approaches and good practice principles to preventing alcohol, tobacco and other drug use in young people. Table 6.3 presents the dimensions used in the data extraction pro-forma.

Table 6.3: Dimensions used to structure data extraction from systematic reviews and primary studies

Systematic review	Primary Studies
<ul style="list-style-type: none"> • Citation • Topic of review • Date of review • Number of studies • Participants • Settings • Research design • Analysis • Major methodological limitations • Geographical region of studies • Theoretical perspectives • Outcome measures • Potential adverse effects • Outcomes and characteristics of effective/ineffective interventions 	<ul style="list-style-type: none"> • Author • Study design • Participants • Intervention focus • Intervention type • Duration of intervention • Follow-up • Original N • Mean age • Gender • Ethnicity • Attrition rate • Final sample size • Key components • Outcomes • Other impacts • Quality score

Due to the marked heterogeneity of the included studies, the data was analysed using systematic narrative synthesis. The majority of studies included in the review had as their primary focus either tobacco use specifically, or were more generally interested in the prevention of substance use. Consequently, the following summary of key findings from this literature is structured by the substance(s) that were the focus of interest in the published studies, namely:

- Prevention of alcohol, tobacco and other drug misuse in young people

- Tobacco use prevention in young people.

Other ways of presenting the results were considered; however, the diversity of the studies included in the review of the evidence precluded any useful alternative.

6.3 KEY FINDINGS

6.3.1 PREVENTION OF ALCOHOL, TOBACCO AND OTHER DRUG MISUSE AMONGST YOUNG PEOPLE

Study characteristics

Three systematic reviews of the literature on initiatives to prevent alcohol and other drug use amongst young people were examined: one Cochrane review on the prevention of youth alcohol misuse (Foxcroft, Ireland, Lister-Sharp, Lowe, & Breen, 2003); and two systematic reviews on school-based approaches (Lister-Sharp, Chapman, Stewart-Brown, & Sowden, 1999; White & Pitts, 1998). A further 23 primary studies using randomised controlled trial methodology were reviewed. The intervention approaches examined in these studies were clustered into the following areas:

- Nine primarily classroom-based sessions (including using computer technology);
- Seven family-directed programs;
- Four multi-component school-based initiatives;
- One mentoring program; and
- One mass media initiative (public service announcements).

Table 6.4 provides a brief summary of these studies (see Appendix B for further details on the systematic reviews and Appendix C for further details on the primary studies).

Table 6.4: Summary of studies on prevention of problems with alcohol, tobacco and other drugs amongst young people

Authors	Study type & topic	Participants	Follow-up	Ethnicity	Conclusions
Systematic review					
Foxcroft, Ireland, Lister-Sharp, Lowe & Breen (2003)	Cochrane Systematic review (56 studies) – <i>Alcohol misuse prevention</i>	Young people <25 years	>3 years	84% US	20/56 studies found interventions were ineffective Three types of promising programs: 1) family-focused intervention; 2) culturally focused skills training; and 3) community interventions
Lister-Sharp, Chapman, Stewart-Brown & Sowden (1999).	Systematic review (63 studies) – <i>Health promotion in schools</i>	Young people <18 years	variable	majority US	25/63 studies of alcohol prevention programs found evidence of effectiveness, with peer interventions the most effective The most effective tobacco interventions involved peers and resistance skills training 14/32 studies of drug misuse programs found evidence of effectiveness, with peer interventions the most effective Some evidence for resistance skills training and involving parents in interventions
White & Pitts (1998)	Systematic review (62 studies) – <i>Drug education in schools</i>	Young people <25 years	variable	90% US	18/62 studies found evidence of effectiveness of drug education in schools Features of effective programs included booster sessions, greater intensiveness and community wide interventions to reinforce messages
Classroom-oriented					
Botvin, Griffin, Diaz & Ifill-Williams (2001)	Primary study – <i>Classroom oriented</i>	Grades 7-8	1.25 years	US	Students participating in cognitive-behaviourally oriented classroom sessions had reduced substance use in comparison with control group
Bryson (1999)	Primary study – <i>Classroom oriented</i>	Grade 8	6 months	US	Students participating in computer-based refusal skills training had significantly improved refusal skills in comparison to control group

Authors	Study type & topic	Participants	Follow-up	Ethnicity	Conclusions
D'Amico & Fromme (2002)	Primary study – <i>Classroom oriented</i>	14-19 years	6 months	US	Benefits from participation in Risk Skills Training Program (brief, interactive motivational program) were not maintained at 6-month follow-up.
Dent, Sussman & Stacy (2001)	Primary study – <i>Classroom oriented</i>	14-17 years	1 year	US	Students participating in classroom-based program (using a motivational, personal and social skills and decision-making model) reduced illicit drug use, and those with higher pre-test alcohol use reduced alcohol use in comparison with controls No effect for tobacco or marijuana use
Donaldson, Thomas, Graham, Au & Hansen (2000)	Primary study – <i>Classroom oriented</i>	Grades 5 & 7	1, 2 & 3 years	US	Students participating in normative education program in public schools reduced alcohol and tobacco use in comparison to control group
Duncan, Duncan, Beauchamp, Wells & Ary (2000)	Primary study – <i>Classroom oriented</i>	Grades 9-12	post-intervention	US	Students participating in interactive CD-Rom program had enhanced refusal skills in comparison to control group
Eisen, Zellman, Massett & Murray (2002)	Primary study – <i>Classroom oriented</i>	Grade 7	1 year	US	Subsets of students participating in a 40 session school-based program (using a social influence model) had reduced substance use in comparison to control group (e.g. students who had not used tobacco prior to intervention, Hispanic students)
Peleg, Neumann, Friger, Peleg & Sperber (2001)	Primary study – <i>Classroom oriented</i>	Grade 10	1 & 2 years	Israel	Students participating in school-based program (underpinned by social skills theory) had reduced growth in alcohol use The program was not effective for students who were regular alcohol users prior to the program
Sussman, McCuller & Dent (2003, in press)	Primary study – <i>Classroom oriented</i>	14-19 years	1 & 2 years	US	Students in a health-educator led classroom program (using a motivation, skills, decision-making model) were less likely to have initiated substance use in comparison to other groups

Authors	Study type & topic	Participants	Follow-up	Ethnicity	Conclusions
Family Directed					
Bauman, Vangie, Ennett, Pemberton, Hicks, King & Koch (2001); Bauman, Ennett, Foshee, Pemberton, King & Koch (2002)	Primary study – <i>Family directed</i>	12 to 14 years	1 year	US	Young people from non-Hispanic white backgrounds participating in family-directed program reduced smoking onset. The program reduced the prevalence of tobacco and alcohol use, although the effects were modest
Dishion, Kavanagh, Schneiger, Nelson & Kaufman (2002)	Primary study – <i>Family directed</i>	Grades 6 to 9	post intervention over 3 years	US	Students participating in school-based family centred strategy had reduced substance use in comparison to control group
Park, Kosterman, Hawkins, Haggerty Duncan, Duncan & Spoth (2000)	Primary study – <i>Family directed</i>	Grade 6	1, 2 & 3.5 years	US	Students whose parents participated in parenting program had reduced growth in alcohol use in comparison to control group
Spoth, Guyll & Day (2002)	Primary study – <i>Family directed</i>	Grade 6	4 years	US	Family skills training delayed initiation of alcohol use and was cost-effective
Storr, Ialongo, Kellam & Anthony (2002)	Primary study – <i>Classroom oriented & family directed</i>	6 years	6 years	US	Students participating in two types of primary school interventions (teachers' behaviour management skills and parenting skills) designed to reduce early risk behaviours for later substance use had a modestly reduced risk of tobacco use
Werch, Carlson, Pappas, Edgemon & DiClemente (2000)	Primary study – <i>Family directed</i>	Grades 7 to 9	6 months	US	Students participating in a brief alcohol use prevention program (primary health care approach using telephone consultations and post cards) reported lower alcohol use on three of four measures in comparison to the control group
Werch, Owen, Carlson, DiClemente, Edgemon & Moore (2003)	Primary study – <i>Family directed</i>	Grade 6	1 year	US	Students participating in a brief alcohol use prevention program (primary health care approach using nurse consultations, post cards and parent materials) had fewer risk factors associated with alcohol use in comparison to the control group

Authors	Study type & topic	Participants	Follow-up	Ethnicity	Conclusions
Multi-component school based					
Komro, Perry, Williams, Stigler, Farbakhsh & Veblen-Mortenson (2001)	Primary study – <i>Multi-component school based</i>	Grades 6 to 8	Post-intervention	US	Students participating in school-based community wide alcohol prevention strategies reduced alcohol use compared with control group, with evidence of dissipation of effects over time
LoSciuto, Hilbert, Fox, Porcellini & Lanphear (1999)	Primary study – <i>Multi-component school based</i>	6 to 14 years	Post-intervention	US	Students participating in multi-component school oriented prevention program reduced substance abuse in comparison with control group, although the effect was small
Perry, Komro, Veblen-Mortenson & Bosma (2003)	Primary study – <i>Multi-component school based</i>	Grade 7	1 & 2 years	US	Male students participating in multi-component school-based resistance skills training program were less likely to increase substance use
Perry, Williams, Komro, Veblen-Mortenson, Stigler, Munson, Farbakhsh, Jones & Forster (2002)	Primary study – <i>Multi-component school based</i>	Grades 6 to 12	Post-intervention over 7 years	US	Students participating in multi-component school and community-based intervention reduced alcohol use in comparison to control group The effect was most evident for younger students when intervention focused on peer influence and developing social skills
Mass media					
Fishbein & Hall-Jamieson (2002)	Primary study – <i>Mass media</i>	Grades 5 to 12	Post-intervention	US	Students rated 16 of 30 anti-drug public service announcements as more effective than controls
Mentoring					
Aseltine, Dupre & Lamlein (2000)	Primary study – <i>Mentoring</i>	Grade 6	6 months	US	Students participating in mentoring program reduced alcohol and other substance use in comparison to control group; however, effects were no longer apparent after six months

The majority of studies were undertaken in the United States across both the systematic reviews and primary studies. Indeed, 22 of the 23 primary studies were US based, and the remaining study was undertaken in Israel. This US orientation has implications for the generalisability of the findings to Australian settings, as US drug policy tends to be underpinned by a moralistic approach to substance use initiatives, while Australian drug policies are guided by harm minimisation strategies (Bammer et al., 2002).

Methodological inadequacies of the reviewed studies limit the strength of the conclusions that can be drawn. In particular, few studies engaged in longer-term follow-up of participants. Five of the 23 primary studies followed up participants for at least three years after cessation of the intervention, while the remaining 18 studies provided follow-up after less than three years. Other methodological limitations included unclear reporting on the methods of randomisation, high attrition rates for study participants particularly in longer term studies, outcome indicators relying frequently on self-reported drug use, failure to report whether the intervention was delivered with fidelity, difficulty in evaluating the effectiveness of specific components of the initiative and lack of data on effect sizes (Foxcroft et al., 2003; Lister-Sharp et al., 1999; White & Pitts, 1998). A further recurring criticism was insufficient attention to account for the difference between the unit of allocation (e.g. class, school or community) and the unit of analysis (e.g. individual). This has the potential to create a positive bias towards intervention effects due to the clustering of participant characteristics within a setting (Foxcroft et al., 2003; Lister-Sharp et al., 1999).

Long-term outcomes in alcohol use prevention programs

(Foxcroft et al., 2003) Cochrane review of alcohol misuse in young people provides particularly high quality evidence for good practice, as the focus of this review is on the effectiveness of interventions over the longer term (i.e. more than three years). This review found that more than a third of the intervention studies were shown to be ineffective, and most were methodologically inadequate. The authors pointed to three interventions which were described as showing promise, although requiring further evaluation, namely:

- The 'Strengthening Families Program' (Spath, Redmond, & Shin, 2001); cited in (Foxcroft et al., 2003) involving seven family-focused sessions for Grade 6 children and their parents, and teaching a range of skills such as communication, discipline, managing emotions, and peer relations.

- Culturally focused skills training (Schinke, Tepavac, & Cole, 2000) for Grades 3-5 children from Native American backgrounds, incorporating Native American myths, legends and stories and aiming to enhance problem-solving, coping and communication skills.
- Community-focused initiatives addressing social institutions which impact on youth substance use, for example targeting underage alcohol purchases (Holder, 1997).

It is noteworthy that two of these three promising initiatives targeted primary school aged youth.

School and classroom oriented initiatives

The two systematic reviews on school-based initiatives found that there was little evidence of long-term impacts on substance use behaviour, due in part to limited longer-term follow-up studies (Lister-Sharp et al., 1999; White & Pitts, 1998). Overall, components that appeared to enhance reduced levels of substance use included:

- Peer-led initiatives;
- Resistance skills training;
- Involving parents in initiatives;
- Booster sessions;
- More intensive initiatives; and
- Community-wide/multi-component focus.

The key components in the ten primary studies of classroom oriented interventions, which showed some evidence of enhancing skills and reducing substance use at follow-up included:

- Refusal skills (Bryson, 1999; Duncan, Duncan, Beauchamp, Wells, & Ary, 2000);
- Normative education (Donaldson, Thomas, Graham, Au, & Hansen, 2000; Taylor, Graham, Cumsille, & Hansen, 2000);
- Personal and social skills (Botvin, Griffin, Diaz, & Ifill-Williams, 2001; Eisen, Zellman, Massett, & Murray, 2002; Peleg, Neumann, Friger, Peleg, & Sperber, 2001); and

- Motivational decision-making approach (D'Amico & Fromme, 2002; Dent, Sussman, & Stacy, 2001; Sussman, Sun, McCuller, & Dent, 2003 article in press).

Family-directed initiatives

The efficacy of family-directed initiatives (i.e. involving parents in some prevention programs) was noted earlier in the findings from (Foxcroft et al., 2003) Foxcroft et al's (2002) Cochrane review of alcohol use prevention programs. The findings from the review of primary studies provided additional support for involving parents. All the primary studies found some evidence of reduced substance use, and six of the seven studies involved follow-up after at least one year (Bauman et al., 2002; Bauman et al., 2001; Dishion, Kavanagh, Schneiger, Nelson, & Kaufman, 2002; Park et al., 2000; Spoth, Gyll, & Day, 2002; Werch, Carlson, Pappas, Edgemon, & DiClemente, 2000; Werch et al., 2003; Werch, Pappas et al., 2000). However, the findings did not allow an understanding of the most effective approaches to involve parents in programs. The types of parental involvement differed substantially across these studies and included:

- Health educator contact with parents (Bauman et al., 2002; Bauman et al., 2001)
- Parent consultant based in a school setting (Dishion et al., 2002);
- Parenting skill-building in a group setting (Park et al., 2000; Spoth, Redmond, Trudeau, & Shin, 2002; R. L. Spoth et al., 2002); and
- Mailed information to parents (Werch, Carlson et al., 2000; Werch et al., 2003; Werch, Pappas et al., 2000).

Multi-component school-based initiatives

Multi-component school-based initiatives involved a range of strategies such as school-based and extra-curricula activities, peer leadership activities, parent participation and education, and community wide activities such as task forces and media campaigns (Komro et al., 2001; LoSciuto, Hilbert, Fox, Porcellini, & Lanphear, 1999; Perry et al., 2003; Perry et al., 2002). The activities tended to occur over several years and evaluation occurred annually. All four of the primary studies evaluating multi-component school-based initiatives found some evidence of reduced substance use in participants, although the effect sizes were moderate and the intervention was more effective for specific subgroups of young people (e.g. males or younger students). As only one study involved follow-up for at least one year following cessation of the initiative the conclusions are tentative.

Other

Two other primary studies addressing the prevention of substance use problems amongst young people were reviewed. A mentoring program for Grade 6 students found that program effects were no longer apparent after 6 months (Aseltine, Dupre, & Lamlein, 2000). A second study on student ratings of the effectiveness of anti-drug mass media announcements found that 16 of the 30 anti-drug public service announcements were more effective than the control intervention. This study did not examine behaviour change or follow-up participants after the intervention (Fishbein, Hall-Jamieson, Zimmer, von Haeften, & Nabi, 2002).

6.3.2 TOBACCO USE PREVENTION IN YOUNG PEOPLE

Study characteristics

A recent Cochrane systematic review was published on each of the following areas of tobacco use prevention amongst young people:

- Mass media interventions (Sowden, Arblaster, & Stead, 2003; Sowden & Arblaster, 2003);
- Community wide initiatives (Sowden et al., 2003);
- Tobacco sales to minors (Stead & Lancaster, 2003); and
- School based programs (Thomas, 2003).

Two other systematic reviews were included in this synthesis: one on laws restricting access to tobacco (Fichtenberg & Glantz, 2002), and one on reducing smoking and exposure to environmental tobacco smoke (Hopkins et al., 2001). Four additional primary studies using randomised controlled trial methodology were reviewed: two classroom oriented interventions (including a family-directed initiative), one multi-component school-based initiative, and one primary care initiative.

The majority of the studies included in the systematic reviews were based in the US. Two of the primary studies were based in the United Kingdom, one in the United States, and one in Canada. One of the four primary studies followed up participants after six years and three followed up outcomes for less than three years after the intervention. As noted in the previous section, the US orientation limits the generalisability of the findings to the Australian setting, and the limited longer term follow-up reduces the strength of evidence of the reported findings.

A brief summary of these studies is presented in Table 6.5 (see Appendix B for further details on the systematic reviews and Appendix C for further details on the primary studies).

Table 6.5: Summary of studies on prevention of tobacco use amongst young people

Authors	Study type	Participants	Follow-up	Ethnicity	Conclusions
Systematic reviews					
Sowden & Arblaster (2003)	Cochrane systematic review (6 studies) – <i>Mass media</i>	9-18 years	variable	83% US	<ul style="list-style-type: none"> • 2 of 6 mass media interventions found reduction in smoking behaviour • Successful interventions were higher intensity and duration
Sowden, Arblaster & Stead (2003)	Cochrane systematic review (18 studies) – <i>Community interventions</i>	Under 25 years	variable	65% US	<ul style="list-style-type: none"> • 2 of 12 community wide interventions helped prevent uptake of smoking in young people in comparison with control group • 1 in 4 studies comparing community interventions to school-based programs reported differences in smoking prevalence • 2 studies reported differences in smoking prevalence between community intervention compared with mass media intervention alone
Stead & Lancaster (2003)	Cochrane systematic review (30 studies) – <i>Preventing tobacco sales to minors</i>	Tobacco retail outlets & school students	variable	63% US	<ul style="list-style-type: none"> • 6 of 11 studies on interventions to prevent tobacco sales to minors found that intervention was more effective in reducing the number of illegal sales to minors in comparison with the control group • 3 of 7 studies found that the intervention was associated with decreased self-reported ease of access for young people • 3 of 5 studies found that the intervention decreased smoking behaviour • Intervention consisting only of information to retailers about the law is not effective • While enforcement is a successful intervention to reduce tobacco sales to minors, regular enforcement is required to sustain compliance

Authors	Study type	Participants	Follow-up	Ethnicity	Conclusions
Thomas (2003)	Cochrane systematic review (76 studies) – <i>School based programs</i>	5-18 years	minimum 6 months	71% US	<ul style="list-style-type: none"> 8 of 16 studies on school-based smoking prevention programs reduced smoking prevalence The most rigorous study involving an intensive eight year program found no long-term effect on smoking behaviour There is some evidence that short-term effects on smoking behaviour can be achieved using programs incorporating social influence models
Fichtenberg & Glantz (2002)	Systematic review (8 studies) – <i>Laws restricting access to tobacco</i>	12-17 years	variable	US-focused	<ul style="list-style-type: none"> There was no evidence that interventions to control youth access to tobacco impacts on smoking prevalence Evidence that young people increase access to tobacco through social sources if commercial access is restricted Several potential adverse effects for youth access interventions were noted
Hopkins, Briss, Ricard, Husten, Carande-Kulis & Fielding et al. (2001)	Systematic review (14 studies) – <i>Reduce smoking and exposure to environmental tobacco smoke</i>	Not reported	variable	US-focused	<ul style="list-style-type: none"> Evidence for the effectiveness of increasing the price of tobacco products, and mass media campaigns in combination with other interventions
Additional primary studies					
Aveyard, Sherrat, Almond, Lawrence, Lancashire & Griffin et al. (2001)	Primary study – <i>Classroom oriented</i>	13-14 years	1 & 2 years	UK	<ul style="list-style-type: none"> Classroom intervention using transtheoretical model was considered ineffective in reducing smoking uptake or use
Brown, Cameron, Madill, Payne, Filsinger, Manske & Best (2002)	Primary study – <i>Multi-component school based</i>	Grades 9 & 10	Post-intervention over 2 years	Canada	<ul style="list-style-type: none"> Interventions focused on youth-led extracurricular activities were associated with lower smoking rates for male students who had not smoked prior to the intervention

Authors	Study type	Participants	Follow-up	Ethnicity	Conclusions
Fidler & Lambert (2001)	Primary study – <i>Primary care intervention</i>	10-15 years	1 year	UK	<ul style="list-style-type: none"> • Young people participating in primary care intervention involving mailed information about smoking from medical practitioner were significantly less likely to initiate smoking • The intervention was more effective for males, younger females and those categorised as ‘definite non-smokers’
Storr, Ialongo, Kellam & Anthony (2002)	Primary study – <i>Family directed</i>	Grade 1	6 years	US	<ul style="list-style-type: none"> • Two primary school interventions focusing on teachers’ behaviour management skills and parenting skills (including family – school partnerships) had reduced risk of tobacco use, although the effect was modest

Mass media

Overall, there was limited support for the effectiveness of mass media initiatives in preventing the uptake of tobacco use in young people. Sowden & Arblaster's (2003) Cochrane review found that successful initiatives involved longer duration and higher intensity, for example more than 160 media spots per year for three to four years. Hopkins et al's (2001) systematic review of initiatives to reduce tobacco use suggested that combining mass media campaigns with other initiatives was more effective than mass media campaigns alone, although they were not able to attribute the relative effectiveness of different elements in these campaigns.

Community initiatives

The Cochrane review of community initiatives for preventing smoking uptake found limited support for community initiatives, although these approaches may be more effective than a mass media campaign alone (Sowden et al., 2003; Sowden & Arblaster, 2003). Community initiatives are coordinated interventions in a particular region or involving groups of people with shared interests. These initiatives overlap with the multi-component school-based interventions discussed above. Initiatives may occur across a range of settings such as school, family and community contexts. For example, school-based initiatives may include school policy development, counselling, curricula and extra-curricula activities and peer-led programs. Family initiatives may include parent education and action groups. Community initiatives may include advocacy for restricted sales to minors, community education and inter-agency collaboration.

Increasing the price of tobacco products and prevention of the sale of tobacco to under-age youth

Increasing the price of tobacco products has been shown to be highly effective in reducing the prevalence and levels of consumption by adolescents (Hopkins et al., 2001). However, research on initiatives to prevent the sale of tobacco to under-age youth has found little evidence of an impact on either the prevalence of tobacco use amongst young people, or their perceptions of access to tobacco (Stead & Lancaster, 2003). Enforcement or warnings of enforcement of tobacco laws with retailers has been associated with reduced sales to young people. However, regular follow-up with retailers is required to sustain compliance and information alone is not sufficient. Fichtenberg and Glantz' (2002) systematic review supported the position that laws restricting youth access to tobacco on smoking prevalence were not effective, and indeed they noted that young people

increase access to tobacco through social sources if commercial access is restricted. The literature reported several risks in using enforcement strategies, such as a community backlash against tobacco control activities if community attitudes are not supportive, shifting the attention of tobacco control efforts away from the industry's marketing practices, and reinforcing the message that if young people smoke they will appear to be more 'adult' (Fichtenberg & Glantz, 2002; Stead & Lancaster, 2003).

Classroom-based education

Thomas' (2003) Cochrane review of the long-term effectiveness of classroom-based education programs to prevent the uptake of smoking found some evidence that school programs using social influence models can have short-term effects on smoking behaviour. However, these changes were often not maintained over the longer term. Indeed, a highly intensive and rigorous study, the Hutchinson Smoking Prevention Project, found no longer term effect on smoking behaviour (Peterson, Kealey, Mann, Marek, & Sarason, 2000). This intensive program took place over an eight-year period and students received 65 intervention sessions drawing on best practice recommendations for social influence programs. The additional primary study included in this review examined a classroom-based program using the transtheoretical model (oriented towards the stages of behaviour change) and also concluded that this approach was not effective (Aveyard et al., 2001).

Teacher and parent oriented initiatives

There is preliminary evidence from a primary study to support intervention strategies with teachers/parents of primary school children (Storr, Ialongo, Kellam, & Anthony, 2002). The program was designed to reduce early risk behaviours for later tobacco use, for example attention problems, aggressive and shy behaviour. Teachers' behavioural management skills, or parent – teacher communication and parenting skills were targeted. At six year follow-up the reduction in risk of tobacco use for the intervention group was significant, although modest. These findings are consistent with Foxcroft et al's (2003) finding that intervening in primary school settings is a promising intervention to prevent later alcohol, tobacco and other drug misuse.

Other

Two other primary studies on preventing tobacco uptake amongst young people were reviewed. Brown et al.'s (2002) study of youth-led extracurricular activities

in a school setting found some evidence of short-term reduction of smoking for male students who had never smoked. A primary care initiative involving mailed information about smoking from the young person's medical practitioner reduced smoking uptake in a subgroup of participants i.e. males, younger girls and non-smokers (Fidler & Lambert, 2001). These studies followed up young people for less than two years, thus warranting further research.

6.4 KEY POINTS

- The evidence base about the effectiveness of initiatives to prevent substance use amongst young people is limited. The majority of studies were undertaken in the US, limiting the application of the evidence to the Australian context due to the US focus on abstinence models as opposed to the harm minimisation approach that underpins most Australian drug policies. In addition, few studies involved long-term follow up, and a range of inadequacies in the research methods were reported.
- Limited research has been undertaken on the effectiveness of a number of approaches to prevent substance use problems in young people (e.g. mass media interventions to encourage people to initiate and maintain tobacco cessation, mentoring programs, youth sport and recreation strategies, Internet-based approaches).
- More than a third of the studies in the systematic reviews found that initiatives did not result in behaviour change, particularly over the longer term.
- Initiatives with some evidence of effectiveness in preventing alcohol, tobacco and other drug misuse amongst young people included:
 - Family-directed initiatives including sessions for primary school age children and their parents
 - Culturally-focused skills training for primary school age children from Native American backgrounds
 - Community-focused initiatives focusing on social institutions which impact on youth substance use
 - School-based initiatives involving parents, booster sessions, more intensive interventions, community wide/multi-component initiatives, peer

led activities, resistance skills training, normative education, developing personal and social skills, and a motivational decision-making approach

- Raising the price of tobacco
- Sustained and intensive mass media campaigns in combination with other initiatives
- Primary school initiatives to reduce early risk behaviours.
- Initiatives which appear to have limited effect on preventing smoking uptake included:
 - Enforcing laws restricting youth access to tobacco
 - School-based initiatives (which provide short-term behaviour change)
 - Short-term, lower intensity mass media campaigns

7. STAKEHOLDER CONSULTATIONS

7.1 BACKGROUND AND SCOPE

A core requirement of the 100% IN CONTROL Review was to appraise the campaign against the needs and expectations of key stakeholders, including young people. Gathering the views and experiences of key informants provides vital information to inform the future directions of the 100% IN CONTROL campaign. However, given the broad scope of the Review and the limited resources available, consultation with stakeholders could not be undertaken to the extent that is warranted. Nevertheless, the methods used were aimed to gather information from as broad a range of stakeholders as possible.

7.2 METHODS

The stakeholder consultation was undertaken in a two stage process. The first stage was conducted by Colmar Brunton Social Research (CBSR) and involved a series of 10 focus groups and several individual interviews and mini-groups. The second stage was undertaken by the Centre for Primary Health Care (CPHC) and involved 13 semi-structured telephone interviews. All consultations took place between July and October 2003 and further details of each stage are provided below. The detailed report from the CBSR consultations is contained in its entirety in Appendix A. For clarity of presentation relevant information has been extracted from the report and integrated with the reporting of the CPHC consultations below.

Stage 1. Fifty-seven individuals participated in the consultations undertaken by CBSR. Twenty-one were workers recruited from across a range of organisations incorporating health and more broad youth-related organisations, while the remaining 36 participants were young people aged between 9 and 17 years. Three teleconference and seven face-to-face focus groups were conducted, with four face-to-face groups in Brisbane and one face-to-face group in Toowoomba. In addition, several individual interviews and mini-groups were conducted on Thursday Island in order to obtain the views of Indigenous young people. Table 7.1 below provides an overview of the characteristics of each group.

Table 7.1: Overview of focus group characteristics.

Group	Target Groups	Location	Type	Number of participants
1	Young urban men 14-17 years	Brisbane	Face-to-face focus group	8
2	Young urban women 14-17 years	Brisbane	Face-to-face focus group	8
3	Young urban men and women 14-17 years	Toowoomba	Face-to-face focus group	8
4	Young Indigenous men and women	Thursday Island	Mini groups and paired interviews	12
5	Central Public Health Unit Network	Regional	Teleconference	4
6	Southern Public Health Unit Network	Regional	Teleconference	4
7	Southern and Other Public Health Unit Network	Brisbane	Face-to-face focus group	4
8	Tropical Public Health Unit Network	Thursday Island	Face-to-face focus group	2
9	Health Corporate and Other Health	Regional	Teleconference	3
10	Links	Brisbane	Face-to-face focus group	4
Total				57

The young people aged in range from 9 to 17 years, with a mean age of 14.4 years. Twenty-one males and fifteen females participated in the discussions, with twenty-four from State schools, seven from Catholic schools and five from other independent schools.

The workforce participants were recruited from throughout Queensland and were selected to provide a broad range of views in relation to the 100% IN CONTROL campaign. In the first instance, participants were recruited from a list provided by Queensland Health. In cases where identified stakeholders were not available to participate in the consultation process, these stakeholders were asked to identify other suitable candidates for recruitment.

The participating young people came from Brisbane, Toowoomba and Thursday Island and were recruited in order to ensure a range of age, gender, smoking/drinking behaviour and awareness of the 100% IN CONTROL campaign. In the first instance, Brisbane and Toowoomba participants were recruited from the CCSR potential participant databases, followed by a snowballing technique in which potential participants identified other suitable participants for recruitment. Indigenous young people were recruited during the

Croc Festival conducted on Thursday Island. Teachers were randomly approached at the Croc Festival to seek approval for their students to be involved in this study. After approval had been granted, teachers signed a consent form and selected students whom they felt would be comfortable talking to a stranger. A time to meet with the students was allocated by the teachers and generally coincided with a break in their Croc Festival schedule of activities or during the lunch break. Given the nature of this target audience and the Croc Festival schedule leaving little or no free time between activities, it was decided to undertake mini-groups and paired interviews as opposed to the more formal focus groups conducted with the Brisbane and Toowoomba based young people.

The groups and interviews were conducted by senior qualitative researchers from CBSR. With the permission of the participants, the groups were audio or video taped. For the teleconferences, notes were made in hard copy. The focus groups lasted approximately two hours and the teleconferences lasted approximately 1.5 hours. Mini-group discussions/interviews lasted between 20 minutes and one hour.

Structured interview schedules were prepared to guide the focus group discussions. An extensive pool of potential areas for coverage in the discussions was developed, and through a process of review and discussions between CBSR and the CPHC, these were refined and tailored to take into account the different relationships of the different stakeholder groups to the 100% IN CONTROL campaign. In general the discussions for the workforce stakeholder groups covered the following areas:

- Participant background and experience with young people, health promotion and alcohol, tobacco and other drugs initiatives;
- Best practice in youth campaigns generally,
- Awareness and familiarity of the 100% IN CONTROL campaign;
- Issues around implementation of the campaign;
- Effectiveness of campaign and comparison to other campaigns; and
- Links between 100% IN CONTROL and other initiatives, groups, organisations and the broader community.

The discussions for the young people groups covered the following areas:

- General participant views on what encourages and discourages the use of alcohol, tobacco and other drugs in young people;
- Awareness and familiarity of the 100% IN CONTROL campaign and its specific elements;
- Evaluation of the campaign and its specific elements; and
- Visioning for future campaigns.

The qualitative research guides used in the study are provided in Appendix A.1.

Stage 2. In order to extend the range of stakeholder views included in the review, a supplementary set of interviews were undertaken by the CPHC. A list of identified 100% IN CONTROL stakeholders not captured in the Colmar Brunton Stakeholder Consultations was obtained from Queensland Health. Identified priority stakeholders were then directly contacted either by telephone or email if a telephone number was not available. After outlining the purpose and method of the consultation process, telephone interviews, and in two instances teleconferences, were arranged with identified stakeholders and a copy of the interview schedule was forwarded to an appropriate contact person via email. Scheduled telephone interviews were subsequently completed with a total of 13 key stakeholders. The organisations represented by interviewees included two Public Health Unit Networks (Southern and Tropical), Corporate Queensland Health, the Commonwealth Department of Family and Community Services, the Commonwealth Department of Health and Ageing, Australian Indigenous Festivals, and the Rock Eisteddfod Challenge Foundation.

Interviews ranged from 30 minutes to over an hour and notes from the interviews were made in hard copy. In order to ensure consistency between the two sets of consultation data, the structured interview schedules used by CBSR were used as the basis for the CPHC interviews. All questions contained within the interview schedules were covered, although the order of these varied in order to promote rapport within the discussion.

7.3 FINDINGS

Key issues and common themes raised through the consultation process were synthesised and are presented below. As identified previously, for clarity of presentation the data from the two stages of the consultation process have been integrated. Findings are presented separately, however, for the workforce and

young people samples. The workforce issues have been grouped into five broad categories, namely:

- Overall impressions of the 100% IN CONTROL campaign
- Perceptions of the 100% IN CONTROL campaign activities
- Perceptions of the 100% IN CONTROL resources and materials
- Implementation of 100% IN CONTROL
- Appropriateness of the target group of the 100% IN CONTROL campaign.

The young people's issues have been grouped into 4 broad categories, namely:

- Drug use behaviour
- Perceptions of the 100% IN CONTROL campaign activities
- Perceptions of the 100% IN CONTROL resources and materials
- Suggestions for improvement.

7.3.1 WORKFORCE PERSPECTIVES

Overall impressions of the 100% IN CONTROL campaign

Overall, key stakeholders indicated that the 100% IN CONTROL campaign is a well-recognised alcohol, tobacco and drug prevention campaign for young people. The 100% IN CONTROL concept was broadly seen as promoting a positive and simple message to young people about being 100% IN CONTROL of their health and themselves. In particular, the campaign was seen as effective in raising awareness among young people of the issues surrounding the responsible use of alcohol, tobacco and other drugs; however, its effect on actual behaviour change was questioned. The range of activities and events under the 100% IN CONTROL umbrella was identified as contributing to the likelihood that health promotion messages would penetrate the target audiences, and that the specific resources were valuable complements to local activities and initiatives. However, key stakeholders also indicated that many 100% IN CONTROL activities and resources needed frequent revising to remain current and relevant to the target audience, and questioned the value of continued resource expenditure on this issue.

Additionally, it was highlighted that the campaign provides a comprehensive and consistent approach to alcohol, tobacco and drug prevention for young people, while having enough flexibility to allow it to be modified to suit different local contexts and communities. Some stakeholders did report, however, a lack of flexibility in regard to some elements of the campaign, which were seen as a 'broad based', 'one size fits all' approach which does not cater in particular to the needs of a diverse range of smaller communities in Queensland. In particular, the need for more flexible funding arrangements to support smaller scale, locally planned and relevant activities was identified as a desirable addition to current approaches.

Key stakeholders identified that the 100% IN CONTROL campaign provides extensive opportunity for the development of networks and partnerships across the community and between the health and education sectors. The campaign's reputation for quality and reliability was identified as central to engaging the local communities in health promotion activities. It was widely emphasised that the sustainability and effectiveness of the 100% IN CONTROL resources and activities was largely dependent on their application within a broader health promotion and prevention context. There was a perception of inadequate resourcing in some areas, for instance a lack of dedicated health promotion staff and/or adequately trained staff involved in the implementation of the 100% IN CONTROL activities. Consequently it was perceived that 100% IN CONTROL was sometimes applied in a piecemeal and ad hoc fashion and that stakeholders were limited in their ability to form a coordinated and comprehensive approach to alcohol, tobacco and other drug prevention initiatives.

Perceptions of the 100% IN CONTROL campaign activities

Several key stakeholders questioned the efficacy of 100% IN CONTROL events such as the Rock Eisteddfod, Croc Festival and, to a lesser extent, Rumble in the Jungle. Concerns centred on the current marketing and implementation of these activities as one-off events isolated from a broader context of health promotion and alcohol, tobacco and drug prevention and education. A key issue identified by these stakeholders was that, in many cases, the events were not accompanied by comprehensive pre- and post-event drug education within the participating schools and local community. It was felt that the health promotion aspect of events was being overtaken by an emphasis on competition. Additionally, the financial and resource costs associated with these campaign events, for both the participating schools and the 100% IN CONTROL campaign

workers, was considered greatly disproportionate to the impact of these events on the alcohol, tobacco and other drug knowledge and behaviour of the target group. This perspective was not shared by all interviewed stakeholders however, as those involved with the coordination and implementation of these events at both the organisation and Government levels consistently emphasised the importance of these events for increasing protective factors, such as life skills and self-esteem, and their effectiveness in imparting a broad healthy lifestyle message for young people.

Ownership was also raised by a number of stakeholders, with some indicating that there is often a high level of student ownership in terms of their performances and the events, while others proposed that greater consideration needed to be given to developing community ownership of these events. It was felt that corporatisation of events was eroding health messages for young people and incurring extra costs for their participation in events. It was suggested that greater local ownership could be achieved by providing structural and financial support to communities wanting to run these events within a strategic framework that enabled the community to eventually manage and support the event from the community level.

Despite concerns regarding the context of the implementation of specific events, there remained considerable commitment by stakeholders to the events, most notably to the Rock Eisteddfod and the Croc Fest, with the latter identified as of particular value for Indigenous young people. Greater ambivalence was evidenced in relation to the Rumble in the Jungle activities, which were viewed as too stale, labour intensive and costly to be useful in engaging local communities in any meaningful fashion.

Perceptions of the 100% IN CONTROL campaign resources and materials

In general, key stakeholders indicated that the 100% IN CONTROL campaign resources and materials were well recognised and valuable in engaging young people. Stakeholders perceived that the resources and materials were most popular with the younger end of the target group but were outmoded and not overly appropriate for the 15 to 17 year old age bracket. However, this perception differed somewhat with respect to urban young people as compared to rural, remote and Indigenous young people. That is, stakeholders involved primarily with rural, remote and Indigenous young people were more likely to be positive about this population's acceptance of and identification with the 100% IN CONTROL resources and materials. Conversely, stakeholders working primarily

in urban settings tended to perceive young people, with the exception of those at the very bottom end of the age bracket (and lower), as no longer identifying with the 100% IN CONTROL resources for reasons such as urban sophistication, saturation and greater commercial competition. This apparent difference between young peoples identification with the 100% IN CONTROL resources and strategies possibly highlights a need to tailor these resources according to identified variations within the cohort of 'young people'.

Stakeholders also emphasised that the campaign resources and materials were most effective when used to support broader prevention activities and education processes, and were modified to suit the local community context. Overall, it was suggested that innovative and creative resource and material development needed to continue and that further consultations with the target group needed to be undertaken, particularly in terms of identifying resources and materials more appropriate to the 15 to 17 year age bracket.

The Eyezone key rings were identified as very popular and as providing a valuable interactive tool for engaging young people, with the electronic game show and spin out wheel also popular but requiring careful targeting to younger and older cohorts to maximise effectiveness. The 100% IN CONTROL website was perceived to have limited interest to young people, although it was acknowledged as having improved as a source of drug and alcohol information. The 'Poison' advertising campaign was considered very effective and useful in raising awareness among young people of the dangers of smoking, although its effect on positive behaviour change was seen as doubtful. The advertising campaign was seen as particularly valuable in terms of reinforcing the information and messages contained in the tobacco resource package used within schools.

Implementation of 100% IN CONTROL

Key stakeholders indicated that the implementation of the 100% IN CONTROL campaign varied significantly between districts due to a range of factors including local contextual factors such as the size and make-up of the community, and disparity in workforce capacity, particularly in terms of knowledge, skills and commitment to health promotion and prevention approaches. It was recognised that workforce training in health promotion and drug and alcohol knowledge was an important component in the effective implementation of the 100% IN CONTROL campaign and in maintaining credibility when working with young people. Key stakeholders also identified the importance of developing network partnerships and linkages with other initiatives and local organisations for

effective implementation of the 100% IN CONTROL campaign activities and strategies. Additionally, the increasing strategic focus of the campaign was identified as essential for long-term sustainability of the impact and outcomes of the 100% IN CONTROL campaign.

Appropriateness of the target group of the 100% IN CONTROL campaign

Most key stakeholders indicated that the current resources, activities and overall concept of the 100% IN CONTROL campaign were no longer appropriate or effective for the upper age bracket of the target group (14 to 17 years). In general, this was attributed to the apparent increased knowledge of 14 to 17 year olds in regards to alcohol, tobacco and drug issues and the earlier drug and alcohol using experiences of this target group. Key stakeholders recommended further consultations with this particular age group to identify and develop new processes of engagement and more appropriate resources and activities for young people aged 14 to 17 years. Conversely, key stakeholders indicated that while many of the 100% IN CONTROL resources and activities were still effective for the lower age bracket of the target group (12 to 14 years), it was becoming increasingly necessary to target an even younger audience in the 100% IN CONTROL campaign activities and strategies. Thus, it was widely recommended by key stakeholders that greater consideration of the target age range for 100% IN CONTROL be undertaken on the basis of current alcohol, tobacco and illicit drug prevalence and age of initiation rates, across a range of young person populations.

7.3.2 YOUNG PEOPLE'S PERSPECTIVES

Drug use behaviour

The young people involved in the consultation process identified early ages for trialling of various substances, with ages for smoking and tasting alcohol as low as 9 or 10 years. For those using tobacco regularly, use was often firmly established by the age of 12 or 13. Drinking was also often firmly established at age 13 or 14. As expected, the use of drugs was mentioned by a much smaller proportion of the young people than was evident for smoking and drinking. Several young people however reported that they had tried marijuana and a few indicated that they continued to use it. This behaviour had been established by the age of 15. The key factor reported by young people in regard to the trialling of alcohol and smoking appeared to be that family or friends had these behaviours and encouraged them in the young person.

Perceptions of the 100% IN CONTROL campaign activities

The young people reported high levels of awareness of Rock Eisteddfod competitions and its association with the 100% IN CONTROL campaign. The young people reported that the event was popular with those individuals who enjoyed performing arts, but that it had limited appeal for other groups of young people. The event's status as a drug-free function was noted as increasing the likelihood that parents would give permission for young people to participate. Awareness of the 100% IN CONTROL message underlying the Croc Festival was high among the Indigenous young people who participated in the event and was seen as an excellent way of engaging young Indigenous people in health promotion messages. The benefits associated with participation in the Croc Festival, as reported by the young people, were most commonly associated with involvement in broader positive experiences, such as meeting new people, learning new things and having new experiences. No young people in the review were aware of any Rumble in the Jungle activities. Most young people questioned the efficacy of the events in impacting on the behaviour of young people, although they were identified as beneficial activities for those young people who did not currently use substances as they provided a non-pressured environment.

Perceptions of the 100% IN CONTROL campaign resources and materials

In general, the young people indicated that the more useful the campaign materials are for them, the more popular they are. For example, the pen, water bottle, backpack and key rings were viewed favourably because they serve a purpose and people can use them in their daily lives. Other items like the posters and certificate of appreciation were described as having little use for young people and so of much less value. However, items such as backpacks and hats, for which popular styles can quickly date, were more controversial, with some young people indicating they were a good way of raising awareness, while others reporting they would never be used. The young people reported that the 'Smart moves on smoking' brochure was useful as it offered alternative strategies to smoking in a realistic manner. The 'Alcohol and You' pamphlet, however, was seen as fake and insincere by the young people. Young people, both Indigenous and non-Indigenous, reported that they found the 'Poison' advertising campaign to be effective at demonstrating the dangers of smoking, and the younger participants indicated that the presence of a well-known actor in the advertisements was valuable, especially if they could identify with the actor and they were perceived to be sincere.

Suggestions for improvement

Young people suggested a range of improvements for the 100% IN CONTROL campaign including more advertising and promotion to increase levels of recognition and participation in the campaign overall; ensuring promotional material is more functional and fun with less emphasis on ‘fads’ or ‘cool’ approaches that outdate quickly; increasing the range of activities and events in 100% IN CONTROL; involving famous people in the campaign events and activities; and including young people in all phases of planing, preparation, testing and evaluation of campaign activities and materials.

7.4 KEY POINTS

- There is a need for greater emphasis on community capacity building through developing network partnerships and linkages with other initiatives and local organisations to maximise the effective implementation of the 100% IN CONTROL campaign activities and strategies.
- Consideration needs to be given to the development of innovative and creative models of funding that increase flexibility and local ownership of campaign events and resources.
- Resources need to be allocated to workforce training in health promotion and drug and alcohol knowledge in order to enable effective utilisation of the 100% IN CONTROL campaign resources and implementation of campaign activities.
- The appropriateness and value of 100% IN CONTROL activities and resources needs to be re-visited according to identified variations within the cohort of ‘young people’, such as young people from rural and remote locations, and Indigenous young people.
- The campaign needs greater emphasis on activities and materials that target a younger audience than is currently addressed by the 100% IN CONTROL campaign.
- The campaign needs greater emphasis on activities and materials that engage the more mature young people.
- The campaign needs to accommodate the key role that family and friends play in the substance use behaviour of young people.

8. 100% IN CONTROL – IMPLEMENTATION AND IMPACT

This chapter provides an examination of the implementation of the 100% IN CONTROL campaign to date. The first section of this chapter overviews the methodology for the meta-analysis of recent, available evaluation reports. This is followed by identification of the key features of the campaign, with the final section presenting the major findings from the meta-analysis.

8.1 METHOD

Across the life of the 100% IN CONTROL campaign, a number of individual activities have been separately evaluated. The review team were provided with copies of these evaluation reports for the purposes of informing the overall review of the 100% IN CONTROL campaign. This qualitative meta-analysis involved two main stages. Firstly, an overview of key findings was developed from the three most recent evaluation reports for each activity. Each of the 100% IN CONTROL activities were considered in relation to a series of criteria, namely:

- Goal/objective;
- Key components;
- Duration;
- Target group;
- Methods; and
- Main Findings.

Secondly, a qualitative meta-analysis was undertaken in order to consider the activities in relation to dimensions of good practice in preventing substance use problems in young people. The key dimensions to inform good practice in the prevention of substance use amongst young people were as follows:

POPULATION DIMENSIONS

- Targeted at developmentally appropriate age periods, in order to capture critical periods and transitions along developmental pathways;

- Appropriately balanced to take into account gender differences in patterns of use and abuse in relation to specific substances i.e. tobacco, alcohol and illicit substances;
- Structured to address the differing needs of particular population groups, notably, Indigenous and Torres Strait Islander people, rural, regional and remote populations, culturally and linguistically diverse populations and young people outside mainstream education and employment settings.

CONTEXTUAL DIMENSIONS

- Consideration of range, variety and appropriateness of settings addressed in relation to needs of young people;
- Extent to which intersectoral collaboration and community partnerships was emphasised and achieved;
- Degree of correspondence between intervention focus and level at which change is expected.

PRINCIPLES OF EFFECTIVE PRACTICE IN THE PREVENTION OF SUBSTANCE USE PROBLEMS IN YOUNG PEOPLE

- Existence of sound evidence base for initiative;
- Development of strong framework to underpin initiative, *(e.g. protective factors, risk factors, resiliency, comprehensiveness, program duration and intensity)*;
- Clear accountability structures and processes in place, *(e.g. accurate information, clear and realistic goals, monitoring and evaluation, program sustainability)*;
- Evidence of understanding and involvement of young people in initiative, *(e.g. developmental relevance, youth perceptions, involvement in program design and implementation)*
- Effective process *(e.g. credible messages, knowledge and skill development, interactive group processes, leader training and qualities)*

Appraisal of the previous evaluation information against these key dimensions of good practice allowed the development of a composite view of the impact of the various 100% IN CONTROL activities. It should be noted that this meta-analysis activity was not intended to be an evaluation or appraisal of the methodology or quality of the individual evaluations, but rather was intended to provide a synthesis of the various findings.

The evaluation reports included in the review are listed below in Table 8.1

Table 8.1 Evaluation Reports included in Meta-analysis

Component of 100% IN CONTROL Campaign	Year	Author/s	Title
Croc Festival	2001	Allard, A., Fitzclarence, L., Nakata, M. & Warhurst, J.	<i>Evaluation of the 2000 Croc Eisteddfod Festival in Weipa.</i> Commonwealth Department of Health and Aged Care
	2001	Research and Marketing Group, Population Health Division	<i>Student Evaluation of the 2000 Croc Eisteddfod Festival – Weipa.</i> Commonwealth Department of Health and Aged Care
	2003	Cultural Perspectives Pty. Ltd	Evaluation of the 2002 Croc Festival, Nhulunbuy, Port Augusta and Moree, Research Report. Department of Health and Ageing
Poison Media Campaign	2001	Market & Communications Research, Brisbane Qld	<i>100% IN CONTROL Poison Cinema Commercial Evaluation, A Research Report.</i> Unpublished report prepared for Queensland Health
	2003	Market & Communications Research, Brisbane Qld	<i>Evaluation of POISON Anti-Smoking Advertising: A Research Report.</i> Unpublished report prepared for Queensland Health
Rock Eisteddfod Challenge (REC)	2001	Cocks, K.	<i>The place of the Rock Eisteddfod Challenge in the extracurricular context.</i> Unpublished Masters of Education Dissertation, University of Western Australia.
	2002	Grunstein, R.	<i>Summary of results of the Rock Eisteddfod Challenge (REC) as an intervention to increase resiliency and improve health behaviours in adolescents.</i> Paper presented at the 3 rd International Conference on Drugs and Young People, Sydney NSW.

Component of 100% IN CONTROL Campaign	Year	Author/s	Title
Rumble in the Jungle	2000	The Castle Research Consultancy, Sydney NSW	<i>Report on a Qualitative Exercise: Rock Eisteddfod Challenge.</i> Unpublished report prepared for NSW Health.
	2001	Youth Development Initiatives Group	<i>Battle of the Burnett Supported by 100% IN CONTROL Rumble in the Jungle.</i> A cooperative initiative of the Monto Community Development Council Inc., North Burnett Health Service District, Mundubbera Community Development Association, Bundaberg Area Youth Services – Youth Options Program & the Queensland Government Youth Suicide Prevention Program.
	2000	Logan Beaudesert Health Service District	<i>'Rumble in the Jungle 2000' Karingal Scout Camp – Mt Cotton Report.</i>
	2000	QE11 and Bayside Health Service Districts	<i>100% IN CONTROL Rumble in the Jungle Team Leader Professional Development Program, Evaluation Report.</i>

8.2 KEY FEATURES OF THE 100% IN CONTROL CAMPAIGN

Key findings from the four main activities in the 100% IN CONTROL campaign are presented below. The emphasis of the review was on the impacts and outcomes from the activities in relation to substance use issues. There are a range of important details in each of the evaluation reports which were not able to be included in this summary, in particular local recommendation for future events. This information is available in the original reports.

It should be noted that in addition to the main activities of the campaign addressed below, Public Health Services, Queensland Health, has recently developed the Cigarette Smoke is 'Poison' School Resource, which provides a wide range of strategies and tools that primary and secondary school communities can use to prevent the uptake of tobacco smoking in young people. Due to its recent development and implementation, no evaluation information on this resource was available for inclusion in this Review. There remains a need to evaluate the uptake of this resource and its effectiveness in preventing tobacco use in young people.

CROC FESTIVAL

Goal/objective

- “a vehicle promoting positive health, education and social messages, and an avenue for students, both primary and secondary, to present dance performances” (Cultural Perspectives Pty Ltd, 2003, p. 5).
- “The Festival is a vehicle for disseminating drug prevention and education messages and addressing reconciliation and social justice issues” (Research and Marketing Group, 2001, p. i) .
- “to promote further improvement in the interpersonal relations of all young Australians; to improve the understanding and appreciation of health education by all young Australians, with particular emphasis on young Indigenous Australians...” (Allard, Fitzclarence, Nakata, & Warhurst, 2001, p. 1).

Key components

- Festival involving Indigenous and non-Indigenous young people’s performances as a “100% drug free experience”
- Orientation is not a competition, instead it is a community festival focussed on participation
- 100% IN CONTROL Health Expo tent hosted at the Festival, involving 100% IN CONTROL in control activities (these vary between sites across Australia)
- Accompanying sports, arts, crafts, personal development and career workshops/activities and Croc disco
- 100% IN CONTROL activities conducted in participating schools and communities in the lead up to the festival, including use of 100% IN CONTROL resources
- Culturally focussed sessions in the school setting in the lead up to the Festival
- Development of culturally appropriate and locally produced resources

Duration

Festivals take place over several days, and involve a series of activities during the school term leading up to the Festival

Target group

Mainly primary school age young people who live in remote communities, with some students speaking English as a second language. Secondary audiences are involved, including teachers, parents, spectators and other participating community members.

METHODS

Allard, Fitzclarence, Nakata & Warhurst (2001)

A range of research methods were used to gather data during the Festival event including:

- Structured interviews with organisers/stakeholders
- Participant observation and interviews
- School visits and interviews with teachers and principals
- Conversation groups involving students, teachers and community members (8 groups)
- Small group discussions with students
- Collection of school attendance records

Other methods included:

- Document analysis of research literature, policy initiatives and historical context
- Post-event pilot questionnaire (3 schools)

Note: No data provided on number of participants in evaluation

Research and Marketing Group (2001)

- Qualitative data gathered through roving interviews during the Festival with groups of students aged between 7 and 14 years (majority of students 11-12 years)
- 22 discussion groups interviewed, with nine groups attending schools in Weipa and 13 groups attending schools in other parts of the Cape York region or the Torres Strait Islands
- Five groups consisted of both Indigenous and non-Indigenous students, and 4 groups consisted of non-Indigenous students

Cultural Perspectives Pty Ltd (2003)

- Benchmark data (Activity Sheets) gathered from 387 school students prior to the Festival (7 primary schools and 4 high schools)
- In-Festival evaluation involved small group and individual interviews with 197 students (from 39 schools), 64 teachers (from over 40 schools), and 23 other significant participants (i.e. parents, spectators and activity supervisors)
- Post-evaluation involved completion of Activity Sheets by 275 students from same schools who provided benchmark data. Interviews with 25 teachers and group discussions with students and community members also took place.

Note: this evaluation did not include Weipa Croc Festival

KEY FINDINGS

Drug Use Behaviour

Cultural Perspectives Pty Ltd (2003)

- There was no significant change in self-reported substance use or absenteeism in young people following the Festival
- Teachers and community members generally reported that no substantial changes were evident in students' substance use behaviours following the Festival activities (however, they appeared pragmatic about the likelihood of change following a one-off event)

Knowledge And Skills

Allard, Fitzclarence, Nakata & Warhurst (2001)

- Cross-generational learning of the 100% IN CONTROL message
- Student participation in school curriculum was oriented around Festival messages in a range of ways, with potential to further develop this integration
- Festival is underpinned by sound educational principles
- Increased awareness of choices and consequences of choices for young people
- Increased self-esteem and confidence in young people
- Enhanced social skills that contribute to success in formal learning and other socio-educational contexts
- Increasing awareness of alternative pathways and broadening perspectives of young people

Research and Marketing Group (2001)

- A substantial proportion of students recalled the message 100% IN CONTROL and the health messages linked to the campaign
- A substantial proportion of students reported that their involvement in the Festival made them think about their own behaviour with regard to substance use and health

Cultural Perspectives Pty Ltd (2003)

- 91% students reported that they learned something new at the Festival, and around 60% could recall learning something new about alcohol, school, fitness or cigarettes
- High levels of recall of specific activities and workshops by young people
- Teachers and community members perceived an increase in young people's self-esteem and confidence

- Teachers and community members regarded the Festival as a worthwhile learning experience promoting health and education messages, and a first-hand experience of a healthy, alcohol and drug free activity for participating young people

Community building

Allard, Fitzclarence, Nakata & Warhurst (2001)

- Enhanced sense of connectedness and community within and between individuals, agencies and communities in the region
- Whole of community involvement in drug and alcohol free activities had positive effect in promoting social behaviours across the community

Research and Marketing Group (2001)

- One of the main benefits the students identified from the festival was meeting new people and coming together across communities

Cultural Perspectives Pty Ltd (2003)

- Teachers and community member perceived improved community relations and partnerships

Cultural Benefits

Cultural Perspectives Pty Ltd (2003)

Teachers and community members perceived the Festival as:

- a vehicle to showcase abilities and achievements of Indigenous people
- an opportunity for students to experience positive role modelling from local and well-known Indigenous personalities
- an opportunity to promote Indigenous services

Other

Allard, Fitzclarence, Nakata & Warhurst (2001)

- Students and other participants described the event as ‘fun’, and valued the participative processes
- Provided evidence of commitment of Qld Health workers and increase in school-based requests to these workers
- Economic benefits to the region

Research and Marketing Group (2001)

- Young people participating in the Festival reported that it was a highly enjoyable experience and that they would return if the event was held the following year
- The best aspects of the festival for participating students tended to be dancing/performing, sport, meeting new people, health messages and fun

Cultural Perspectives Pty Ltd (2003)

- Ratings of the Festival by students, teachers, parents and other community members overall were extremely positive
- Some teachers reported that the Festival had a positive impact on school attendance or a positive influence on the students’ engagement in the school setting

Barriers/Adverse consequences

Allard, Fitzclarence, Nakata & Warhurst (2001)

- Some tensions between different sectors involved in the Festival regarding the purpose of and organisational arrangements for the event
- Logistical issues re hosting the Festival on an annual basis
- Use of school resources, and difficulties of smaller schools in accessing sufficient resources
- As the Festival increases in size, resources of Qld Health staff are increasingly stretched
- Significant costs are involved in transportation from most remote areas

- Concerns by education officials about the learning processes and outcomes from the Festival
- Importance of agenda setting for the Festival reflecting local community priorities and needs

Cultural Perspectives Pty Ltd (2003)

- Teachers and community members reported that access to the Festival was hampered by a range of factors including:
 - the need for language support as a number of students spoke English as a second language
 - age appropriateness of activities for both primary and high school students
 - cost and distance for students from out-of-town
 - lack of support and information provision eg. linked to promotion, school/parent/community support

POISON MEDIA CAMPAIGN

Goal/Objective

- anti-smoking media campaign

Key Components

- Poison anti-smoking cinema/television commercial
- Community Service Announcement (featuring Rebecca Cartwright from 'Home and Away')
- Support strategies for the commercial including the 100% IN CONTROL website and merchandise

Duration

- Not reported

Target Group

- Young people age 12-17 years (non-smokers or experimental smokers)

METHODS

Market & Communications Research (2001)

- Qualitative research methods involving 6 focus groups of 8-10 young people
- 74 participants in total (41 non-smokers and 33 smokers; 29 male and 45 female; 22 aged 12-14years, 24 aged 14-16 years; and 28 aged 15-17 years)
- Four focus groups in Brisbane and two in Toowoomba
- Composition of focus groups included a mix of non and experimental smokers, private and state school students, and from a range of suburbs and socio-economic backgrounds

Market & Communications Research (2003)

- Qualitative research methods involving 11 focus groups (5 in Brisbane, 2 in Cairns, 2 in Rockhampton and 1 in both Biloela and Roma)
- 10 in-depth telephone interviews with young people in Mt Isa, Thargomindah, Charleville, Yowah and Cunnamulla
- 112 participants in total
- Composition of focus groups included a mix of non and experimental smokers, private and state schools, and from a range of suburbs and socio-economic backgrounds. Five groups consisted of males and 5 groups of females. There was a mini-group of male and female Aboriginal and Torres Strait Islander participants. Several participants lived on rural properties.

KEY FINDINGS

Smoking Behaviour

Market & Communications Research (2003)

- Non-smokers reported that they felt proud of their decision not to smoke after seeing the commercial, and some reported pressuring their parents with the anti-smoking message

- Only a few experimental smokers reported that they changed their behaviour as a result of seeing the commercial along with other factors that contributed to this behaviour change

AWARENESS/RESPONSE TO CAMPAIGN

Market & Communications Research (2001)

- The majority of participants recalled seeing the POISON commercial
- The most frequently mentioned messages from the commercial included: “smoking is the same as ingesting poison/smokes are poison”, “cigarettes cause harm or may affect your health”, cigarettes can/do kill” and “don’t smoke” (p. 12)
- When focus group participants were asked to write down their reactions to the messages from the commercial, 73% reflected acceptance of the message, 16% neutral and 11% rejection
- There was a high level of agreement that the commercial gives a clear message that smoking damages health
- Non-smokers were more likely than smokers to report that the commercial made them feel less inclined to smoke, supporting the proposition that the commercial was more effective in supporting a non-smoker’s choice not to smoke than a deterrent to current smokers
- Participants perceived that the commercial was likely to be most effective for: “girls who have not tried smoking”, “people who are more naïve/impressionable” and “people who only smoke a little or do not smoke at all” (p. 12)

Market & Communications Research (2003)

- High levels of recall and recognition of the Poison commercial and Community Service Announcement, with participants in remote areas less likely to have seen the commercials
- At least four ingredients in cigarettes were recalled in each focus group

- The most common message from the commercial was that “cigarettes contain poison/poisonous chemicals” (p.11)
- Participants perceived the message as being “objective” (p. 32)
- 80-85% of the participants comments about the message were positive and 10% were negative
- Questionnaire responses indicated that the campaign delivered a clear message
- The greatest differences between the responses of smokers and non-smokers were in relation to the social status of smoking, such as being ‘less inclined to smoke’ or the ‘coolness’ of smoking, suggesting that the campaign is more effective in supporting a non-smokers decision not to smoke rather than influencing experimental smokers

Negative/neutral responses

Market & Communications Research (2001)

- 11% of participants reported negative reactions to the commercial, with the most frequently reported being that the commercial was not believable/realistic
- 16% of participants reported neutral reactions to the commercial, with the most frequently reported being that they had heard the message before
- Smokers were less likely to agree with statements about the commercial reflecting that smoking was not “cool”
- Both smokers and non-smokers tended to have lower levels of agreement that they “could watch the add many times” (p. 13)

Market & Communications Research (2003)

- Negative comments tended to be linked to the commercial not delivering new information, and these comments were more likely to be made by smokers
- Lower ratings of questionnaire statements were gained on the following: “making smokers feel inclined to smoke less”, “suggesting that smoking is

not cool”, “making the ad appear as though it is ‘talking to someone like me”, “likeability” and “ability to watch the ad many times” (p. 39)

WEBSITE

Market & Communications Research (2001)

- The majority of participants were not aware of the 100% IN CONTROL website and many reported that they were not likely to visit this site. However after viewing the site most reported that it was “better than they had expected” (p. 15)

Market & Communications Research (2003)

- None of the participants had visited the 100% IN CONTROL website prior to the evaluation
- Younger people tended to find the site more appealing

ACTIVITY

ROCK EISTEDDFOD CHALLENGE (REC)

Goal/objective

- “To allow high school students the opportunity to creatively express their attitude towards a theme of their choice” (Cocks, 2001, p. 33).
- “promoting a healthy lifestyle for young people; specifically in the year 2000, to promote a non-smoking lifestyle by affiliation with the Quit campaign” (p. 4)
- “the focus of the competition is on young people having fun and leading healthy lifestyles” (p. 2)

Key components

- National performance competition between schools
- Preparation of school performances by students, teachers, parents and communities
- Professional entertainment venue with a professional crew

- Delivery of anti-drug and anti-smoking messages, smoke free event
- Use of promotional merchandise

ROCK EISTEDDFOD WEBSITE

Duration

Annual event

Target group

12 to 17 year old young people

Methods

Cocks (2001)

- Qualitative analysis of stakeholder perspectives of the REC in relation to school curricula
- Data collection involved interviews, document study and ethnographic observation
- Interviews with 35 stakeholders from 3 secondary schools (government and non-government, metropolitan and outer metropolitan, across different socio-economic areas)
- Interviewees included principals, teachers, parents and students

Note: This evaluation was based in Western Australia

Grunstein (2002)

- Cross-sectional analysis of students from schools participating in the REC and non-participating schools, as well as students who did/did not participate in the REC within participating schools
- Schools included state and private schools, co-educational and single sex, metropolitan and outer Sydney
- Mean age of sample of students from participating schools was 14.7, and mean age of sample of students from non-participating schools was 15.1

Note: This evaluation was based in NSW

The Castle Research Consultancy (2000)

- 7 group discussions with students from both participating and non-participating schools, different school years, different socio-economic areas, and males and females
- 6 groups located in greater Sydney area and 1 in Wollongong
- 4 in-depth interviews with teachers and a further 20 telephone interviews with teachers
- Teachers represented both high and low socio-economic areas and both metropolitan and regional locations

Note: This evaluation was based in New South Wales

Key findings

SUBSTANCE USE BEHAVIOUR

Grunstein (2002)

- Students in schools participating in the REC s appeared to have lower rates of substance use in comparison to non participating schools
- Statistically significant associations between participation in the REC and non-smoking behaviour as well as reduced levels of binge drinking
- Students participating in the REC had reduced intention to smoke, while increases were found for this measure for non-participating students (from the same school and from non-participating schools)

Knowledge and skills

Cocks (2001)

- The REC is aligned with the school's mission statements to "produce "well-rounded" individuals who are able to achieve success in life" (p. 113)

- The REC experience helps develop life skills in students such as teamwork, communication, interpersonal skills, creativity, leadership, commitment, self esteem, discipline and time management
- The extra-curricula activities of the REC are linked to the in-school hours curriculum framework, and facilitates worthwhile student learning outcomes in a range of fields (particularly in the arts)
- The REC provides a collaborative learning exercise for students

Grunstein (2002)

- More than 95% of students from schools participating in the REC and 87.5% of students from non-participating schools were aware of the REC anti-substance use message

The Castle Research Consultancy (2000)

- Students were able to develop new skills including time management, teamwork and self-esteem
- Teachers and students were positive about Quit's sponsorship and message during the event
- Teachers and students noted that the REC approach to the anti-smoking message was supportive, interesting, non-authoritarian and involved "personal points of contact as well as mass advertising" (p. 11)
- Students reported that the smoke-free event had a short term impact on smoking behaviour during the event period

Resiliency

Grunstein (2001)

- At the time of pre-event rehearsals participants in the REC had a greater sense of 'belonging' to their school than non-participants from the same school
- Students at schools participating in the REC had higher overall resiliency in comparison to students in non-participating schools, and students participating in the REC had higher overall resiliency scores in comparison

to students from the same school who did not participate. (Characteristics of resiliency included: identity, belonging, sense of purpose, problem solving skills, social competence, attitudes towards substance use and peer/family substance use)

- There was some evidence that characteristics of resiliency changed over time and could be influenced by participation in the REC

Support for at-risk students

Cocks (2001)

- The REC has the capacity to support students at risk of ‘dropping out’ or ‘failing’

Community building

Cocks (2001)

- The REC helps foster relationships between the school, parents and the broader community (including increased sense of community within the school)

The Castle Research Consultancy (2000)

- The REC assisted to breakdown barriers within the school between groups of students/students and teachers/school and parent bodies/school and community

Other

The Castle Research Consultancy (2000)

- Participating students and teachers were highly positive about the event
- Students reported that participation in the REC enhanced the school image among parents and community

Grunstein (2002)

- Participating students reported positive attitudes towards the REC

Barriers

Cocks (2001)

- Financial and resource costs
- Time commitment from students, staff and parents

The Castle Research Consultancy (2000)

- Male students tended to be less interested in participating

Teachers noted that Quit's exposure to students prior to the performance day was

- limited, and recommended increasing the channels for the smoke free message to be introduced to school events
- Substantial commitments required in relation to time (for students and parents), finances and other resources

Non-participating students risk feeling excluded

ACTIVITY

RUMBLE IN THE JUNGLE

Goal/objective

- “to encourage young people living in the rural communities of the Central and North Burnett to develop their life skills, confidence, resources and opportunities to be actively involved in their communities” (Youth Development Initiatives Group, 2001, p. 6).
- “To provide an alternative adventure-based activity for young people at risk and to educate these young people about the harms associated with alcohol and other drug use, and related criminal activities” (Logan Beaudesert Health Service District, 2000, p. 4)
- “The team leader workshop was developed to provide team leaders with knowledge and skills necessary to facilitate the development of a team, to participate in the Bayside District 100% IN CONTROL Rumble in the Jungle 2000 event” (QE11 and Bayside Health Service Districts, 2000, p. 25)

Key components

- “Team based activities focusing on physical, mental and creative challenges” (Youth Development Initiatives Group, 2001, p. 3).
- Involvement of young people in all aspects of the event
- High levels of interagency/intersectoral collaboration
- 100% IN CONTROL merchandise
- Prize presentations
- Each event includes some local initiatives eg. performances by local indigenous young people in lunch break, Queensland Health display, post-event mocktail party for each team

One event provided a Team Leader Professional Development Program

Duration

One day event, with young people involved throughout the planning and development of the project

Target group

- 12-17 years (some younger people took part to complete teams)
- “young people... at risk or who have the potential for engaging in risk taking behaviours related to alcohol and other drug use” (Logan Beaudesert Health Service District, 2000, p. 6).

Methods

Youth Development Initiatives Group (2001)

- Documentation of number of participants, organisations and individuals involved in the event
- Qualitative feedback from “participants, volunteers, organisers, organisations involved, parents, schools, local councils, local newspapers” (p. 20)

- Chat back (feedback) forms completed by 43 participants (67% male, 80% were 14 years or younger, 26% from Aboriginal/Torres Strait Islander backgrounds)

Logan Beaudesert Health Service District (2000)

- Chat back forms completed by 38 participants (at least: 71% male, 68% between 13 and 16 years, 13% from Aboriginal/Torres Strait Islander backgrounds and 11% from non-English speaking backgrounds)
- Collation of information about the event including participant comments about their involvement

QEII and Bayside Health Service Districts (2000)

- Focus of evaluation was on the team leader workshop and manual designed to enhance team leader knowledge and skills to prepare for their role in the event developed for the Bayside District 100% IN CONTROL Rumble in the Jungle 2000
- 15 team leaders participated (9 female and 7 male) from a range of health, education, youth and welfare organisations

Evaluation tools included self-administered surveys, semi-structured telephone survey and a focus group

MAIN FINDINGS

Participation

Youth Development Initiatives Group (2001)

- 110 young people involved in 2001 (increase in comparison to previous years)
- Active involvement by young people in all stages of the event, including 11 young people on organising committee and 40 volunteers on the event day
- Involvement of 9 community organisations/agencies
- Increased support for the event by local media

Logan Beaudesert Health Service District (2000)

- Participation of approximately 60 young people
- Eleven youth-oriented agencies invited to participate, substantial involvement by the scouts, and donations from a range of local clubs, business and other organisations

BENEFITS

Youth Development Initiatives Group (2001)

- Gaining skills such as leadership, teamwork, problem solving and communication
- Enjoyable drug free activity
- Opportunity to meet young people
- Increase in self confidence
- 98% of participants completing Chat back cards identified the event as having an anti-drug message or the campaign message
- 51% of participants completing Chat back cards agreed that the event made them think about their behaviour in relation to the health message, and 30% reported that they would change this behaviour
- 98% of participants completing Chat back cards rated the event as good or excellent

Logan Beaudesert Health Service District (2000)

Participants reported that their involvement helped them gain skills such as

- leadership, trust, teamwork, and specific skills such as learning to abseil
- 87% of participants completing the Chat Back cards identified the health message as being either an anti-drug message or the campaign message
- At least 68% of participants completing the Chat back cards reported that the event made them think about their behaviour in relation to the health

message, and 68% reported that it influenced them to decide to change this behaviour

- 90% participants completing the Chat back cards rated the event as either excellent or good

WORKER SKILLS AND KNOWLEDGE

QEll and Bayside Health Service Districts (2000)

Evaluation of the Team Leader Professional Development Program workshops developed for the Bayside District 100% IN CONTROL Rumble in the Jungle found:

- the initiative enhanced knowledge and skills about team leader facilitation
- the workshop was valued by the participating team leaders
- the team leader manual was viewed as useful and relevant

Issues

Youth Development Initiatives Group (2001)

Time constraints meant some participants felt disappointed at not completing the activities

8.3 FINDINGS FROM QUALITATIVE META-ANALYSIS OF EVALUATION REPORTS

The second stage of the review involved the adoption of a ‘meta-evaluation’ approach. The various activities were considered against key dimensions to inform good practice in preventing substance use problems in young people.

POPULATION DIMENSIONS

Overall, the campaign initiatives target a broad spectrum of young people. While all the activities potentially target both males and females, some appear particularly appealing to females (e.g. the Rock Eisteddfod Challenge) while others are more likely to involve male participants (e.g. Rumble in the Jungle). Both the Croc Festival and the Rumble in the Jungle activities involve young people from Indigenous and Torres Strait Islander backgrounds. Further, these

activities allow the participation of young people from rural and remote areas, as the Croc Festival is based in the remote Cape York area, and the Rumble in the Jungle has been held in rural areas in Queensland. Each of the initiatives has the potential to either support students at risk of dropping out of school, or involve non-school attendees. The extent to which this was done is unclear from existing information. A less developed aspect of the campaign activities is the capacity to involve young people from culturally and linguistically diverse backgrounds, with none of the activities specifically oriented towards engaging this group.

CONTEXTUAL DIMENSIONS

The 100% IN CONTROL activities have a well-developed reach in the community, and the potential to address a number of levels of intervention. The activities take place in a range of settings eg. home, school, youth-oriented agencies and recreational contexts (cinema and festival). The initiatives involve collaboration between young people, the school community, parents, youth-oriented agencies and the wider community. Some activities span across several or all of these settings. The Poison media campaign has less developed links with other initiatives and agencies. However, young people were involved in the development of the commercial, and the 100% IN CONTROL website and supporting merchandise could be used to further extend campaign reach into schools and other settings. All the activities involve working at more than one level of intervention that is, addressing substance use issues at individual, group, organisational, and community levels.

PRINCIPLES OF EFFECTIVE PROGRAMS TO PREVENT SUBSTANCE USE PROBLEMS IN YOUNG PEOPLE

Each of the 100% IN CONTROL activities contains components that are aligned with the current evidence base. Good practice components include the development of youth led extracurricular activities, involving parents in substance use prevention activities, developing initiatives with multiple components which engage the wider community, and ensuring that the mass media campaign was relatively intense and extended over several years. However, it was unclear from the evaluation reports as to the extent that some of these good practice principles occurred in the practical implementation of the activities, for example youth leadership or involving parents.

The framework for the 100% IN CONTROL campaign initiatives includes a number of sound principles. Strategies used in the activities are consistent with the good practice principle of addressing protective factors, risk factors and resiliency. These include, but are not limited to, the focus on knowledge and skill-building, parental involvement, enhancing school attendance, promoting personal and social skills in young people, and building support systems (Gilvarry, 2000; Swadi, 1999). Indeed, Grunstein's (2002) evaluation of the Rock Eisteddfod provided some evidence that participation was linked to resiliency. One issue raised in the evaluation reports of the Croc Festival was the age appropriateness of Festival activities for both primary and secondary students.

The evaluation reports provided little information about the extent the activities are tied to complementary efforts by others to prevent substance use amongst young people, particularly at the level of policy and influencing other social institutions. However, the initiatives engage a range of local agencies and organisations. The activities take place over an extended period of time, for example involving young people in preparation for the events, and running the Poison campaign over several years. Indeed, there was some evidence of campaign saturation for this initiative.

The 100% IN CONTROL campaign has made a substantial effort to ensure accountability through ongoing monitoring and evaluation of the events, although few reports attempted to evaluate behaviour change resulting from the activities. This is a challenge shared across the field of health promotion and prevention. Evaluation of the campaign's impact on factors that have been found to determine or mediate substance use problems in young people is warranted for future activities. Accountability issues were also raised by some adult participants in the Rock Eisteddfod and Croc Festival evaluations, where they expressed concerns about the relative benefits from the program in relation to its costs and level of required resources.

A strength of the 100% IN CONTROL campaign which was clearly evident in the evaluation reports was its capacity to involve young people. Young people generally enjoy the activities, recognise the value of having tobacco and substance free events, and accept the health messages. Further, there is the potential for substantial involvement of young people in the preparation and implementation of the events, and this had occurred for many of the activities.

A key emphasis in the Croc Festival, Rock Eisteddfod and Rumble in the Jungle initiatives is on developing 'life skills' such as team building, problem solving and communication. These activities are highly interactive, and often include the opportunity for participants to gain knowledge about substance use issues, for example using the Spin Out Wheel. The focus of the Poison campaign focus was on knowledge rather than skills. While many young people perceived that the message of this campaign was 'objective', some were unsure if it was realistic/believable. A key recommendation for any future anti-smoking mass media campaigns generated from focus groups of young people was to address the social context of smoking for young people.

Finally, evaluation of the Croc Festival indicated that enhanced support and information for teachers, parents and the community about the running of the event would be valued. The benefits of prioritising leader support was borne out by training offered during a Bayside District Rumble in the Jungle, which was well-received by team leaders.

Table 8.1 overviews some of the main themes that emerged from the evaluation reports in relation to these key dimensions.

Table 8.1: Main themes emerging from evaluation reports of 100% IN CONTROL activities in relation to good practice principles in the prevention of youth substance use problems

Key dimensions	Croc Festival	Poison Media Campaign	Rock Eisteddfod Challenge	Rumble in the Jungle
Population Dimensions				
<i>Age</i>	Mainly primary school age (with some secondary students)	12 to 17 years	12 to 17 years	12 to 17 years
<i>Gender</i>	Males and females	Males and females	Males and females (generally more participation by females)	Males and females (generally more participation by males)
<i>Indigenous and Torres Strait Islander People</i>	A key focus	Not a key focus	Not reported	Some Indigenous and Torres Strait Islander participants
<i>Rural and Remote Areas</i>	A key focus	Not a key focus	Not reported	Some participants from rural and remote areas
<i>Culturally and Linguistically Diverse Backgrounds</i>	Not a key focus	Not a key focus	Not reported	Some participants from culturally and linguistically diverse backgrounds
<u>Non-School Attendees</u>	- Potential to enhance school attendance	- This population may access television - Campaign may be most effective for non-smokers	- Not applicable, although potential to support students at risk of 'dropping out' or 'failing'	- The potential to involve non-school attendees
Contextual Dimensions				
Setting	School, recreational	Home, recreational (cinema)	School	Recreational (including agencies supporting young people)

Key dimensions	Croc Festival	Poison Media Campaign	Rock Eisteddfod Challenge	Rumble in the Jungle
Intersectoral Collaboration and Community Partnerships	- School-parent-community-interagency partnerships	Not a key focus	- School –parent-community partnerships	- Youth- interagency - community partnerships
Level of Intervention	Individual, group, organisational, community	Individual, community	Individual, group, organisational, community	Individual, group, organisational, community
Principles of effective practice in the prevention of substance use problems in young people				
Sound Evidence Base	<ul style="list-style-type: none"> - Multi-component school based intervention - Other elements within program included: culturally-focussed skills training; youth led extra curricular activities; parent involvement 	<ul style="list-style-type: none"> - Successful mass media interventions tend to be high intensity and duration - Some evidence for effectiveness of mass media campaigns in combination with other interventions 	<ul style="list-style-type: none"> - Extra-curricular activity with potential for youth leadership - Other elements within program included: developing personal and social skills, parent involvement, multi-component school based intervention 	<ul style="list-style-type: none"> - Extra-curricular activity with potential for youth leadership, and the development of personal and social skills
Strong Framework <i>(eg. protective factors, risk factors, resiliency, comprehensiveness, program duration and intensity)</i>	<ul style="list-style-type: none"> - Promotes personal and social skills in young people with cultural focus - Complementary to other local youth health initiatives - Preparation for event occurs over extended period - Issue of age appropriateness for both primary and secondary students 	<ul style="list-style-type: none"> - Some evidence of campaign saturation - Participants tended to be unaware of campaign website 	<ul style="list-style-type: none"> - Promotes personal and social skills in young people - Some evidence that participation is linked to resiliency - Complementary to other local youth health initiatives - Preparation for event occurs over extended period 	<ul style="list-style-type: none"> - Promotes personal and social skills in young people - Preparation for event occurs over extended period

Key dimensions	Croc Festival	Poison Media Campaign	Rock Eisteddfod Challenge	Rumble in the Jungle
Accountability <i>(eg. accurate information, clear and realistic goals, monitoring and evaluation, program sustainability)</i>	<ul style="list-style-type: none"> - Ongoing evaluation undertaken, although challenge to undertake impact/outcome evaluation - Issue re program costs and resources 	<ul style="list-style-type: none"> - Ongoing evaluation undertaken, although challenge to undertake impact/outcome evaluation 	<ul style="list-style-type: none"> - Ongoing evaluation undertaken, although challenge to undertake impact/outcome evaluation - Issue re program costs and resources 	<ul style="list-style-type: none"> - Ongoing evaluation undertaken, although challenge to undertake impact/outcome evaluation
Understand and Involve Young People <i>(eg. developmental relevance, youth perceptions, involvement in program design and implementation)</i>	<ul style="list-style-type: none"> - Well-developed capacity to involve young people 	<ul style="list-style-type: none"> - Some evidence the social context of smoking is underdeveloped in campaign 	<ul style="list-style-type: none"> - Well-developed capacity to involve young people 	<ul style="list-style-type: none"> - Substantial involvement by young people in development and implementation of event
Effective Process <i>(eg. credible messages, knowledge and skill development, interactive group processes, leader training and qualities)</i>	<ul style="list-style-type: none"> - Skill development focus is 'life skills' including enjoyable activities without substance use - Participants aware of campaign health message - Support for teachers/leaders required 	<ul style="list-style-type: none"> - Campaign focus is on 'knowledge' rather than 'skill' development - Participants generally perceived the message as 'objective' - Some participants reported that the campaign message was not believable/realistic 	<ul style="list-style-type: none"> - Credible anti-smoking message - Focus on development of 'life skills' 	<ul style="list-style-type: none"> - Leader training well-received - Participants aware of campaign health message - Focus on development of 'life skills'

8.4 MAJOR ACHIEVEMENTS AND KEY SUMMARY POINTS

- Overall, the 100% IN CONTROL strategies are aligned with principles of good practice in the prevention of substance use in young people.
- The activities target a wide spectrum of young people in Queensland, although they appear to be less developed for people from culturally and linguistically diverse backgrounds. Further, the extent the initiatives involve young people from rural and remote areas was unclear.
- The initiatives take place in a range of settings, address multiple levels of intervention, and have the potential for substantial collaboration between groups and sectors. However, the evaluation reports provided little information about the extent the activities are tied to complementary efforts by others to prevent substance use amongst young people, particularly at the level of policy and influencing other social institutions.
- Components of each of the activities are consistent with the evidence base. However, it was unclear to what extent some good practice principles occurred in the practical implementation of the initiatives, for example youth leadership or involving parents.
- Principles of effective programs to prevent substance use in young people are reflected in each of the strategies, with the focus of three of the four activities on the development of 'life skills' in the context of extra-curricular or non-school based activities. There is the potential to expand or refocus the activities to encompass further dimensions that are supported by the evidence.
- There is a challenge to evaluate program outcomes in relation to factors that have been found to determine or mediate substance use problems in young people.
- For more recent elements of the multi-faceted campaign, such as the Cigarette Smoke is 'Poison' School Resource, there remains a need to evaluate these elements and their effectiveness in preventing tobacco use in young people.

9. FUTURE DIRECTIONS AND RECOMMENDATIONS

The purpose of this final chapter is to set out a range of strategic policy options that can support considerations about future directions for 100% IN CONTROL. The content of previous chapters provides a detailed examination of the campaign and the wider context of scientific evidence, public views, including those of young people, and initiatives at strategic and program levels in Queensland and elsewhere.

9.1 CONSIDERATIONS IN THE DEVELOPMENT OF STRATEGIC POLICY DIRECTIONS

Informed by the information presented in previous chapters, several issues were considered in preparing the policy options presented below.

First, the multiple funding sources with different conditions, output expectations and timelines means that 100% IN CONTROL cannot have a clear cut single goal or completion date. Rather, 100% IN CONTROL has developed over time as a 'brand' within which several initiatives take place. This is likely to continue into the future given the nature of funding arrangements in the state and national context, in combination with the need to address the use of a range of substances and their concomitant consequences. How to develop effective initiatives within a well accepted and recognised brand is likely to be the way forward to any future multifaceted initiative.

Second, Australia and so Queensland is fortunate in having reasonable surveys of young people's substance use over many years. This means that long term impacts of multifaceted programs like 100% IN CONTROL can be plotted over the longer term. The impact on localities is much harder to determine and will probably remain so except in some special cases. Plotting trends in consumption and related problems with major prevention initiatives should become possible both retrospectively and into the future and will contribute significantly to the development of the evidence base regarding efficacious approaches to prevention of substance use amongst young people.

Third, the key focus of 100% IN CONTROL accords in general terms with national strategic directions and is likely to do so into the future. The focus on demand reduction could, in the future, be augmented with consideration of

strategic prevention initiatives that focus on environments rather than mainly the individual, as is the case at present.

In terms of individual focus, consideration of developmental issues, particularly those at the bottom end of the age range and those at the top end may help to fine tune more appropriate prevention messages and program initiatives. The concept of pathways into substance use and out of risk could be better employed in the future.

Fourth, current initiatives do broadly comply with the evidence for good practice in media campaigns and programs for young people. As such the program supports the principles of the National Drug Strategic Framework (NDSF) which encourages the adoption of an evidence based approach. The evidence base is, however, limited by poor designs, in part because of the difficulty in conducting rigorous studies on programs that have multifaceted components. The long lead-time of effects on substance use behaviours also affects our understanding of the impacts of initiatives taken during childhood and adolescence. However, the fact that considerable resources are currently placed into substance use prevention could provide for much better linkage between these initiatives and better research initiatives that are Australian and so can help build a more suitable evidence base.

There is an undervalued leadership role for Queensland Health in promoting evidence based good practice in the prevention of substance use to the community, business and across government. Enhancing this role has the potential to create a better-informed professional and public engagement with substance use prevention. The development and extension of understanding of concepts such as health promotion and community capacity building is essential in order to improve the delivery of current campaign components. This need is evident both within the health sector and more broadly across the whole of government and beyond. Were such a knowledge transfer objective to be adopted it might be expected to make future initiatives more effective and easier to establish. As a potentially new outcome of such initiatives, indicators of prevention knowledge in both the professions and the public would need to be developed.

Fifth, there will be considerable benefit in adopting wider concepts and evidence for psychosocial development beyond attempts to address risk and protective factors. In particular, research findings about the significance of resiliency and

factors that enable resilient individuals and environments may benefit substance prevention programs given that exposure to tobacco, alcohol and substance use is highly likely as young people pass through the adolescent years. Furthermore, integration of emerging evidence regarding the utility of initiatives that address the role of peers and family influences on substance use among young people has the potential to enhance the impact of preventive approaches.

Sixth, although young people are involved in aspects of the 100% IN CONTROL initiative, there is a consistent view that their involvement could be considerably strengthened in the organisation of activities across the full spectrum of planning, designing, implementing, managing and evaluating events, activities and products. Fostering young people's leadership could be a goal of new initiatives.

To strengthen leadership for prevention initiatives among Indigenous groups and organisations and across cultures was recognised as important to future target initiatives by many key informants. Similarly, increased emphasis on strengthening local community ownership of initiatives is vital to the development of effective mechanisms for preventing substance use amongst young people.

9.2 STRATEGIC POLICY SCENARIOS

POLICY SCENARIO ONE – MAINTAINING THE STATUS QUO

Description – The current mix of initiatives continues with periodic end point evaluations of specific aspects from time to time. Budgets are renegotiated with the Commonwealth, the Department of the Premier and Cabinet and within Queensland Health. Minor modifications are made to update initiatives as evidence strengthens.

The commitment to a multifaceted approach continues.

Advantages – The evaluation suggests most aspects of the program have bedded down quite well with reasonable local support and a growing expertise at state-wide, regional and many local area levels.

Moreover, most key informants express positive sentiments for 100% IN CONTROL, suggesting ongoing support into the medium term.

100% IN CONTROL also stands up well as a state initiative that addresses the NDSF principles and goals and the available evidence for good practice.

The local popularity of many aspects of the program, particularly the festivals gives it a visible hands-on feel, important to local communities keen to get involved with prevention. As such the program may continue to receive support from elected government representatives.

Potential risks – At present, 100% IN CONTROL is vulnerable to changing funding agreements and priorities in many of its components. Indeed, its branding flagship, the media campaign, is particularly vulnerable because of its external funding beyond Queensland Health. This will make a coherent approach uncertain into the future.

Like all branded initiatives, there will be a need for brand renewal to maintain impact. While brand recognition appears reasonable (it could be improved) there will come a point when re-branding or brand strengthening will be advisable to maintain the initiatives' headline status for young people, regional initiatives and local events.

Increasingly, initiatives outside those within 100% IN CONTROL may develop in schools and communities, diminishing potential impacts of better-aligned resources, and indeed may lead to diminished relevance in some cases. There are already initiatives that could sit within the brand but do not.

The update of evidence conducted for this evaluation, which suggest some improvements to the design of prevention initiatives, would not necessarily be adopted. In turn, over time there would be a diminishing of the quality and application of good practice.

POLICY SCENARIO TWO – GRADUAL CLOSURE OF 100% IN CONTROL

Description – While 100% IN CONTROL has continued good appeal and addresses the principles and goals of the NDSF it could be argued that, given the length of the campaign implementation to date, there is a need for a fresh approach.

It appears that considerable expertise and knowledge about prevention programs has now been effectively transferred to regions, Queensland Health, other participating government departments and communities so that corporate support and sponsorship now provides less value for a return of central effort.

The interlinked nature of many of the components of 100% IN CONTROL suggests a phased withdrawal over a period of perhaps two years. Plans to

transfer responsibility for funding to more local levels could be given some support over the transition period.

Advantages – A well-planned corporate withdrawal of tangible support would offset what could become a crisis management approach as funding for various components of the program are not renewed. Given the popular appeal of some aspects of the program a well-planned withdrawal would give opportunities for alternatives to be considered and public and professional expectations to be addressed.

From an evidence point of view it would recognise that while 100% IN CONTROL does largely meet good practice principles, these are based on limited research and that funds expended could be better allocated to programs that demonstrated better certainty of outcomes.

There is at least some suggestion that better targeted and specific initiatives directed at those most at risk or to areas of highest potential disadvantage such as Indigenous communities would be a better direction for prevention programs, rather than universal branding and multifaceted approaches. Withdrawal of the brand and replacement with a range of well targeted initiatives might address areas of high need in a climate of fiscal restraint, although evidence for specific targeting of this type is not conclusive for population health improvements. In some cases it can be a disadvantage.

Potential risks – Even the best well planned withdrawal will run into difficulties and requires careful management of the potential public relations and health outcome effects. Without clearly delineated alternatives it is unlikely public expectations to address substance use risks by young people will be met.

Although there are limitations to the current program of activities, a considerable body of expertise and knowledge about drug prevention appears to have developed across the State as a result of 100% IN CONTROL and to fail to foster this would be to reduce the State's capacity to engage with young people and their communities in drug issues that could take many years to recover. The bases for building partnership approaches, central to NDSF, would be undermined.

Within the national context, Queensland would move from its leadership position in the development and use of multifaceted approaches branded through a mass media campaign to a minor role.

POLICY SCENARIO THREE – BUILDING A BETTER HEALTH PREVENTION STRATEGY

Description – To the present, 100% IN CONTROL has been identified as primarily a health prevention strategy. Over the past several years the evidence base for health development strategies has improved. Adding to existing directions in the field of substance use by the addition of the more general scientific findings from health prevention and promotion could add value to 100% IN CONTROL.

Specifically this would mean greater attention in the design of initiatives to account for differences in developmental issues and psychosocial tasks in early adolescence and late adolescence. Usually these focus on the transitions into the adolescent years about the time of entering high school to Year 10. The later transition is usually towards young adulthood and focuses on Years 11 and 12 and the pathway to training, further education, employment and different forms of leisure activities (such as visiting licensed premises).

A further addition is the inclusion of strategies that are known to enhance resiliency in the individual, given that exposure to substance use is almost inevitable in adolescence and the creation of local and wider environments that support resilient behaviours.

Advantages - Queensland Health is a leader in evidence-based approaches to health and in the professional understanding and management systems to support evidence based approaches, unlike other areas of government and the community sector. It is also likely to be able to effect change in its own organisation more quickly and effectively. Although there remains a need for enhanced capacity within Queensland Health's workforce in regard to health promotion and capacity building, its public health workforce in the regions has the ability to prorogate evidenced based approaches and to work with others to effect change.

The approach builds upon an already established platform of linkages into the wider community and key organisations and individuals to add value at low cost.

There is also some opportunity to provide continued corporate direction in an area of public and political concern.

Potential risks – It is well recognised that multi-sector approaches have the advantage of pooling a greater level of resources and aligning these to achieve a

set of prevention goals. Such approaches also have the advantage of addressing environments, such as the school, which lay outside the domain of Queensland Health's influence. The focus on only a health strategy is unlikely to take full advantage of this now accepted wisdom.

It would seem to not entirely meet the aspirations of the NDSF, which places some emphasis on partnership building and would seem set to strengthen this approach into the future.

On the other hand, well run partnerships are not easy to find as yet, with the effort more in the intention than in the substance. Moreover, the evidence for solid health outcomes from partnership approaches is yet to be demonstrated (Roussos & Fawcett, 2000).

Within the context of current government direction, it is likely that the failure to address such an issue as a whole of government response is likely to be increasingly raised.

POLICY SCENARIO FOUR – A STRATEGIC GOVERNMENT COMMUNITY BUSINESS

PARTNERSHIP

Description – 100% IN CONTROL has involved a wide range of organisations and individuals in its festivals and other more local activities. This has the potential to provide a springboard for a more formal arrangement in terms of funding and resourcing activities at local and regional levels.

The development of strategic and local partners would become a key activity in public health both across government and in communities. Corporate planning and support via partnership grants and training initiatives would become the main focus along with establishing quality controls perhaps through licensing arrangements for drug prevention events and products.

The partnerships would need to provide for commercial opportunity and it may be that the 100% IN CONTROL initiative itself would be outsourced to an agency that fosters partnerships to avoid conflicts of interest with government agencies. This policy scenario changes the role of government to funder and contractor for outcomes while ensuring a level of quality control but allows regional and local initiatives to flourish. While some of these elements exist at the program level at present, a wider number of organisations and sponsors is envisaged here. The

attempt would be to localise in order to avoid a one size fits all approach, one of the criticisms of the current festival approach.

Advantages – The partnership approach has the potential to generate a much wider funding base and local commitment to substance use prevention.

It ensures government remains as a regulator and quality control function to protect the public interest.

With encouragement it may provide opportunities for particular groups to involve their peak organisations and business affiliations to become involved in better-targeted initiatives.

Potential risks – The capability of the public sector to generate partnerships that have a commercial quality, particularly in the human services sector, is quite limited at present. The chance that a rather un-uniform set of programs will eventuate where there is goodwill rather than in areas of highest risk is quite likely to occur.

While it appears that quality controls could be put in place, the cost and benefit of this approach has not been well considered to this time.

It remains unclear how much lead-time is needed to get a well-established strategy implemented given a lack of culture in the public and private sectors for such an approach at this time.

Less ambitious partnerships at the strategic level may be easier to initiate given the current culture of practice. At local levels grant conditions to enhance partnership building may be a more achievable. These less ambitious partnership goals will nevertheless require considerable set up time and resources.

POLICY SCENARIO FIVE – AN INTEGRATED WHOLE OF GOVERNMENT APPROACH TO DRUG USE PREVENTION

Description - a whole of government approach recognizes that prevention of substance use by young people is a matter of concern to a range of portfolios. From the public perspective and that of young people, it makes limited sense to link risk of use solely to one government department primarily concerned with the delivery of health and medical services.

A whole of government strategy would make use of branding and the regulatory frameworks and quality controls this requires along with 'joined up' budgets and

lines of influence into business and community sectors, to produce outcomes in the prevention of substance use. The best available evidence for addressing risk factors, prevention, and resiliency within the context of sound understanding of psycho-social development, cultural relevance and supportive communities would be applied to the development of a whole of government strategy.

The role of Queensland Health's Public Health Services would be to provide information and guidance on the best approaches to take while other portfolios would provide access to young people in schools, communities and the workplace as well as other functions.

Clear governance arrangements and reporting requirements are needed to ensure cross-portfolio programs meet the quality assurance requirements so that these maintain the credibility of the 'brand' name and campaign.

Advantages – this scenario seeks to align the initiative with changing demands for whole of government programs and resourcing. It should add value by creating the opportunity to widen the influence of good practice while discouraging limited initiatives with little supporting evidence in both the public and community sectors.

If carefully planned, it should align branding initiatives with local initiatives of a much wider kind that can address a variety of needs, both locally and culturally specific as well as developmental. Under the branding label different strands of social marketing should be possible along with more local activities that conform to best practice.

The incorporation of community engagement approaches, particularly with young people, would encourage commitment and knowledge growth in Queensland's regions.

Potential Risks – whole of government approaches can too easily get stuck in interdepartmental processes and expend resources of process rather than clear achievements in the public domain. The level of sound knowledge about best approaches, and the level of acceptance by management of sound whole of government approaches is yet to be well grounded in the public sector leading to a lack of responsiveness.

Risks are reduced when there is high level commitment for a whole of government initiative, endorsed by Cabinet with accountability established, a lead

agency recognised and allocations for programs built into line department budgets, linked to ‘joined up’ outcomes.

In conclusion, the available information suggests that the 100% IN CONTROL campaign represented an empirically sound approach to substance use by young Queenslanders that was appropriate to the times. Given recent, albeit limited, developments in the evidence base concerning efficacious approaches to the prevention of substance use and its concomitant consequences, in combination with changing patterns of substance use amongst young people, it would seem timely that the future direction of the campaign is re-considered. Further discussions concerning the directions of the 100% IN CONTROL campaign would benefit from the identification of an appropriate forum for policy debate and development. Such a forum should ideally bring together a range of knowledge and expertise, including input from the private, non-government, government, academic and broader public arenas, with representation from across a range of sectors that are associated with the health and well-being of young people. The provision of a mechanism to allow for the involvement of local community groups, including local government, would also be advantageous. However, in order for such a group to be most effective, it is necessary that it has sufficient profile and credibility to create the appropriate environment for dynamic discussion and action regarding future directions for the 100% IN CONTROL campaign.

9.3 RECOMMENDATIONS

A series of recommendations flow from an analysis of the information presented in this Report and from examination of the policy scenarios presented above. This final section outlines these recommendations, grouped according to their specific focus. The determination of possible future directions for alcohol, tobacco, and other drug prevention programs for young people in Queensland is necessarily and unavoidably complicated by the level and adequacy of funding allocated to these efforts. Efforts aimed at impacting upon licit and illicit drug use will vary in their mix of preventative, early intervention and treatment focus, with this variation reflecting priorities of the time. Nevertheless, it must be remembered that the capacity of preventative efforts to achieve their goals must be considered within the constraints imposed by the level of resources that have been allocated to the task. Furthermore, any consideration of future directions for the 100% IN CONTROL campaign must take into account such constraints.

GENERAL

- 1. The goal and objectives of the current Campaign should be retained and integrated into future prevention approaches.**

The goal and objectives of the 100% IN CONTROL Campaign reflect the State and national directions for prevention of alcohol, tobacco and other drug use. The goal and objectives are also supported by evidence based upon research into prevention.

- 2. The current campaign activities have considerable merit overall, but the Campaign requires adjustments over time to ensure updating to comply with the emerging evidence base and improved targeting in specific initiatives.**

100% IN CONTROL is perhaps best considered as a brand name for a set of well considered strategies and activities. Overall the current initiatives are well aligned with the accumulating evidence base for effective campaigns of this type. Specific modifications to some aspects of the campaign are recommended in order to maximize consistency with advances in the evidence base (see recommendations below). Consideration to supplementing existing campaign activities with the trialling of innovative approaches is also warranted.

The adherence to the standard 100% IN CONTROL brand has some merits in that it allows for a cumulative impact of the underlying message. Also, the range of strategies, events and materials incorporated by the brand allows for some flexibility to respond to local needs and circumstances. However, should changes be made to the campaign, consideration will need to be given to the appropriateness of continuing to badge specific activities and/or new activities with the current message, depending on the age of the target audience.

- 3. Queensland Health should encourage a stronger whole of government approach to prevention of alcohol, tobacco and other drug use among young people, in which the 100% IN CONTROL campaign is only one aspect.**

The 100% IN CONTROL Campaign is the Queensland Health response to the reduction of risk and the enhancement of protective factors associated with alcohol, tobacco and other drug use in 12 to 17 year old young people. There is considerable merit in a stronger whole of government approach to

prevention in which the Campaign is one aspect. Such a whole of government approach should be developed in three stages:

1. The alignment of strategies, budgets and other initiatives across government departments and the setting of over-arching performance indicators and quality assurance measures based upon best practice principles outlined in this report.
2. The allocation of a whole of government budget distributed to create allocative efficiency in line with the most effective multi-strategy approach to prevention.
3. The building of strategic and local partnerships to support, fund and implement the prevention initiatives and disseminate sound knowledge about best practices in prevention in the community.

LEADERSHIP

4. **Queensland Health should encourage the development of supportive structures which enhance the leadership capacities of young people through greater involvement in the planning and implementation of 100% IN CONTROL campaign activities.**

The Campaign should strengthen the leadership of young people in the planning, organizing and evaluating initiatives at the local and State levels through fostering leadership. Leadership has the longer term benefit of growing a committed group of younger people with the enthusiasm and knowledge to address a range of health and social issues. Such an initiative should be aligned with other initiatives that seek to involve young people in state governance.

5. **Adopt a governance structure that clearly identifies a lead group or agency with a mandate to direct debate and coordinate prevention policies and activities for young people.**

A whole of government approach envisages a leadership role either for a designated lead agency or some over-arching mechanism with a mandate beyond simple coordinating functions. The leadership role should entail authority to implement strategy across Departments and with the community and business sectors. It would also have the function of ensuring alignment with Commonwealth initiatives.

INVOLVEMENT OF YOUNG PEOPLE, FAMILIES AND THE BROADER COMMUNITY

6. Encourage greater involvement of young people, families and local communities in the development, implementation and evaluation of prevention activities.

Although there currently exists some emphasis on broad involvement in campaign activities, greater participation of young people, families and local communities should be incorporated into 100% IN CONTROL strategies. In particular, there is a need to develop innovative strategies to engage these groups to a much greater extent than currently occurs in the development and planning of activities at the local level. The encouragement of locally based partnerships that draw on community capacity building models and work in line with overall State strategic directions is warranted. Such coalitions could be supported by the development of flexible funding structures that allow for local control of resources.

PROFESSIONAL DEVELOPMENT

7. Support, guidance and professional development structures should be further developed in order to facilitate effective implementation of 100% IN CONTROL initiatives.

Health promotion and community capacity building constructs underpin the 100% IN CONTROL campaign, and are central to the campaign's effectiveness. However, in order for the campaign to be successful, some elements in particular require a workforce that has the appropriate knowledge and skills and level of commitment to utilise campaign resources appropriately and progress these directions. Development of knowledge and skills in a broad range of stakeholders involved to differing degrees in the campaign would enhance the utility of the current strategies. While the Campaign is well aligned with evidence that supports good practice, this evidence base is not currently disseminated to a wide range of professionals from cross-disciplinary backgrounds and in communities. As part of a health information strategy this information should be regularly distributed and encouragement to apply this knowledge base adopted.

RESEARCH AND EVIDENCE BASE ALIGNMENT

8. It is recommended that future prevention efforts should maximize responsiveness to the diverse needs of young people from differing backgrounds.

Effective prevention and promotion activities are responsive to the developmental, cultural, language, socio-economic and lifestyle differences

that are reflected within the population of young people. Currently, there exists a need for the 100% IN CONTROL activities to be revised in order to more appropriately meet the needs of differing groups of young people. In particular;

1. The current Campaign does not clearly make the distinction between approaches that appear best suited for the pathway into adolescence and the pathway to young adulthood. In the future the Campaign should develop strategies that target activities at younger age groups than are currently the focus of 100% IN CONTROL strategies, accompanied by initiatives that appropriately involve parents. The Campaign should also develop strategies that take account of developmental issues at the transition to high school to year 10 and the transition to work, further education and training from year 11 onwards;
2. Specific efforts aimed at young pregnant women and young mothers are warranted, as are specific efforts to support families in which the parents or potential parents have substance use histories;
3. Given the evidence of earlier onset of alcohol, tobacco and other drug use among Indigenous young people and the substantial risks this presents for health and social difficulties not only in adolescence but also during adulthood, increased efforts need to be made to prevent the uptake of use in childhood and the earlier period of adolescence. Initiatives that encourage a community wide response with indigenous communities should be encouraged;
4. There appears to be a need, within the planning and implementing of initiatives under 100% IN CONTROL, for greater emphasis on engaging organisations and young people from culturally and linguistically diverse backgrounds; and
5. Consideration needs to be given to the needs of urban young people. While many current campaign activities appear to be appropriate for young people from rural and remote locations, there exists a need to develop strategies that take into account the experiences of young people from more resourced locations.

9. The current risk and protective factor approach should be extended to emphasise emerging knowledge on resiliency and supportive environments.

There will be benefits in adopting wider concepts of psycho-social development beyond the current attempts to address individual risk and protective factors. In particular the emerging research literature on resiliency and the significance of supportive environments should be built into future initiatives.

10. Current campaign activities could be complemented by the incorporation of innovative strategies.

As previously indicated the available information suggests that the 100% IN CONTROL campaign as it stands represents an empirically sound approach to substance use by young Queenslanders. Given recent, albeit limited, developments in the evidence base concerning efficacious approaches to the prevention of substance use, in combination with changing patterns of substance use amongst young people, there remains an opportunity, however, for the effectiveness of current campaign activities to be enhanced by the trialling of the inclusion of additional strategies into the multi-component campaign. Such additions might include strategies that involve peers and/or locations aimed at the settings in which young people are exposed to alcohol, tobacco and other drugs. The trialling of any such initiative should be accompanied by rigorous evaluation.

11. Future evaluations should target the explicit linking of prevalence and intervention data.

At present information on the prevalence patterns of substance use among young people is not linked over time to major policy and program initiatives. As a consequence it is not possible to evaluate the overall effect of focusing on risk and protective factors in any form of time series analysis. In the future the linking of prevalence data with intervention data over time will enhance the quality of the evidence base in Queensland.

Finally, changes to the future direction of the 100% IN CONTROL campaign should be accompanied by a change facilitation strategy which supports the involvement of all stakeholders in the implementation of any modifications to the campaign.

REFERENCES

- Alcohol Tobacco and Other Drug Services. (1996). *School Drug Education: Policy, Principles, Practice for Health Workers*. Brisbane: Public Health Branch, Queensland Health.
- Allard, A., Fitzclarence, L., Nakata, M., & Warhurst, J. (2001). *Evaluation of the 2000 Croc Eisteddfod Festival in Weipa*: Commonwealth Department of Health and Aged Care.
- Aseltine, R. H., Jr., Dupre, M., & Lamlein, P. (2000). Mentoring as a drug prevention strategy: An evaluation of Across Ages. *Adolescent and Family Health, 1*(1), 11-20.
- Australia, C. o. (1999). *National Tobacco Strategy 1999 to 2002-03 and companion documents(background paper & summary plan)*. Canberra ACT: Ministerial Council of Drug Strategy.
- Australian Bureau of Statistics (ABS). (1998). *Queensland's Young People*. Canberra: ABS.
- Australian Health Ministers. (2003). *National Mental Health Plan 2003-2008*. Canberra: Australian Government.
- Australian Institute of Health and Welfare (AIHW). (2003). *Statistics on drug use in Australia 2002* (AIHW cat no. PHE 43). Canberra: AIHW (Drug Statistics Series no. 12).
- Aveyard, P., Sherratt, E., Almond, J., Lawrence, T., Lancashire, R., Griffin, C., & Cheng, K. K. (2001). The change-in-stage and updated smoking status results from a cluster-randomized trial of smoking prevention and cessation using the transtheoretical model among British adolescents. *Prev Med, 33*(4), 313-324.
- Ballard, R., Gillespie, A., & Irwin, R. (1994). *Principles for Drug Education in Schools*. Canberra: University of Canberra.
- Ballard, R., White, V. M., & Hill, D. J. (1992). *Cigarette and alcohol consumption among Queensland secondary schoolchildren in 1990*. Melbourne: Centre for Behavioural Research in Cancer.
- Bammer, G., Hall, W., Hamilton, M., & Ali, R. (2002). Harm minimisation in a prohibition context - Australia. *ANNALS, AAPSS, 582*, 80-93.
- Baum, F. (2002). *The new public health* (Second Edition ed.). Melbourne: Oxford University Press.
- Bauman, K. E., Ennett, S. T., Foshee, V. A., Pemberton, M., King, T. S., & Koch, G. G. (2002). Influence of a family program on adolescent smoking and drinking prevalence. *Prev Sci, 3*(1), 35-42.
- Bauman, K. E., Foshee, V. A., Ennett, S. T., Pemberston, M., Hicks, K. A., King, T. S., & Koch, G. G. (2001). The influence of a family program on adolescent tobacco and alcohol use. *American Journal of Public Health, 91*(4), 604-610.
- Bell, B., Hilson, M., Chauvin, J., Yeong, C. C., Dick, B., Glynn, T., & Riley, L. (1999). *International Consultation on Tobacco and Youth. What in the World Works? Final Report Conference*. Singapore: World Health Organization.

- Botvin, G. J., Griffin, K. W., Diaz, T., & Ifill-Williams, M. (2001). Drug abuse prevention among minority adolescents: posttest and one-year follow-up of a school-based preventive intervention. *Preventive Science, 2*(1), 1-13.
- Bryson, R. (1999). Effectiveness of refusal skills software. *Journal of Drug Education, 29*(4), 359-371.
- Canadian Centre on Substance Abuse. (2001). *Preventing Substance Use Problems Among Young People: A Compendium of Best Practices*. Ottawa: Health Canada.
- Cocks, K. (2001). *The Place of the Rock Eisteddfod Challenge in the Extracurricular Context. Unpublished Masters of Education Dissertation*: University of Western Australia.
- Commonwealth Department of Health and Aged Care. (2000). *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health 2000*. Canberra: Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care.
- Commonwealth of Australia. (1997). *Tough on Drugs! The Right Approach for the Right Results*: Commonwealth of Australia.
- Commonwealth of Australia. (1999). *National Tobacco Strategy 1999 to 2002-03 and Companion Documents (Background Paper & Summary Plan)*. Canberra ACT: Ministerial Council of Drug Strategy.
- Commonwealth of Australia. (2001). *Australian Alcohol Guidelines: Health Risks and Benefits*. Canberra: National Health & Medical Research Council.
- Cultural Perspectives Pty Ltd. (2003). *Evaluation of the 2002 Croc Festival, Nhulunbuy, Port Augusta and Moree Research Report*: Department of Health and Ageing.
- D'Amico, E. J., & Fromme, K. (2002). Brief prevention for adolescent risk-taking behavior. *Addiction, 97*(5), 563-574.
- Darke, S., Ross, J., Hando, J., Hall, W., & Degenhardt, L. (2000). *Illicit Drug Use in Australia: Epidemiology, Use Patterns and Associated Harm* (Monograph Series No. 43). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Degenhardt, L., Lynskey, M., & Hall, W. (2000). *Cohort Trends in the Age of Initiation of Drug Use in Australia*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Dent, C. W., Sussman, S., & Stacy, A. W. (2001). Project towards no drug abuse: Generalizability to a general high school sample. *Preventive Medicine, 32*(6), 514-520.
- Department of Education, T. a. Y. A. (2001). *Curriculum Studies: CS-10 Drug Education and Intervention in Schools: The State of Queensland*, Department of Education.
- Department of Education Training and Youth Affairs. (1999). *National School Drug Education Strategy*: Commonwealth of Australia.
- Department of Education Training and Youth Affairs. (2000). *National Framework for Protocols for Managing the Possession, Use and/or Distribution of Illicit and Other Unsanctioned Drugs in Schools*: Commonwealth of Australia.
- Dishion, T. J., Kavanagh, K., Schneiger, A., Nelson, S., & Kaufman, N. K. (2002). Preventing early adolescent substance use: A family-centered strategy for the public middle school. *Prevention Science, 3*(3), 191-201.

- Donald, M., Dower, J., Lucke, J., & Raphael, B. (2000). *The Queensland Young People's Mental Health Survey Report*. Brisbane: Centre for Primary Health Care, School of Population Health, and Department of Psychiatry, University of Queensland.
- Donaldson, S., Thomas, C., Graham, J., Au, J., & Hansen, W. (2000). Verifying drug abuse prevention program effects using reciprocal best friend reports. *Journal of Behavioral Medicine*, 23(6), 585-601.
- Duncan, T. E., Duncan, S. C., Beauchamp, N., Wells, J., & Ary, D. V. (2000). Development and evaluation of an interactive CD-ROM refusal skills program to prevent youth substance use: "Refuse to use". *Journal of Behavioral Medicine*, 23(1), 59-72.
- Dunne, M. P., Yeo, M. A., & Keane, J. (2000). Substance use by Indigenous and non-Indigenous primary school students. *Australian and New Zealand Journal of Public Health*, 24(5), 546-549.
- Eisen, M., Zellman, G. L., Massett, H. A., & Murray, D. M. (2002). Evaluating the Lions-Quest "Skills for Adolescence" drug education program: First-year behavior outcomes. *Addictive Behaviors*, 27(4), 619-632 FTXT: ScienceDirect (tm) http://www.sciencedirect.com/science?_ob=GatewayURL&_origin=SilverLinker&_urlversion=614&_method=citationSearch&_volkey=0306%0302d4603%2327%23619%23234&_version=23611&md23615=d24659b23618f23613a23697b2049283a2049206a2049344b2049288e2049288.
- Fichtenberg, C. M., & Glantz, S. A. (2002). Effect of smoke-free workplaces on smoking behaviour: systematic review. *BMJ*, 325(7357), 188.
- Fidler, W., & Lambert, T. W. (2001). A prescription for health: A primary care based intervention to maintain the non-smoking status of young people. *Tobacco Control*, 10(1), 23-26.
- Fishbein, M., Hall-Jamieson, K., Zimmer, E., von Haefen, I., & Nabi, R. (2002). Avoiding the boomerang: Testing the relative effectiveness of antidrug public service announcements before a national campaign. *American Journal of Public Health*, 92(2), 238-245.
- Fitzgerald, J. L., & Swards, T. (2002). *Drug Policy: The Australian Approach*: Australian National Council on Drugs.
- Forero, R., Bauman, A., Chen, J. X. C., & Flaherty, B. (1999). Substance use and socio-demographic factors among Aboriginal and Torres Strait Islander school students in New South Wales. *Australian and New Zealand Journal of Public Health*, 23(3), 295-300.
- Foxcroft, D. R., Ireland, D., Lister-Sharp, D. J., Lowe, G., & Breen, R. (2003). Primary Prevention For Alcohol Misuse In Young People. *The Cochrane Library*(2).
- Gilvarry, E. (2000). Substance abuse in young people. *Journal of Child Psychology and Psychiatry*, 41(1), 55-80.
- Glasziou, P., Irwig, L., Bain, C., & Colditz, G. (2001). *Systematic Reviews in Health Care: A Practical Guide*. Cambridge: Cambridge University Press.
- Gordon, R. (1987). An operational classification of disease prevention. In J. A. Steinberg & M. M. Silverman (Eds.), *Preventing Mental Disorders*. Rockville, MD: Department of Health and Human Services.
- Gray, D., Morfitt, B., Ryan, K., & Williams, S. (1997). The use of tobacco, alcohol and other drugs by young Aboriginal people in Albany, Western Australia. *Australian and New Zealand Journal of Public Health*, 21(1), 71-76.

- Grunbaum, J. A., Kann, L., Kinchen, S. A., Williams, B., Ross, J. G., Lowry, R., & Kolbe, L. (2002). Youth Risk Behavior Surveillance - United States, 2001. *The Journal of School Health*, 72(8), 313-328.
- Harden, A., Weston, R., & Oakley, A. (1999). *A Review of the Effectiveness and Appropriateness of Peer-delivered Health Promotion Interventions for Young People*. London: EPI-Centre, Social Science Research Unit.
- Holder, H. D. (1997). A community prevention trial to reduce alcohol-involved trauma. *Addiction*, 92(Supplement 2), whole issue.
- Holman, C. D. J. (1992). Something old, something new: Perspectives on five 'new' public health movements. *Health Promotion Journal of Australia*, 2(3), 4-11.
- Hopkins, D. P., Briss, P. A., Ricard, C. J., Husten, C. G., Carande-Rulis, V. G., Fielding, J. E., Alao, M. O., McKenna, J. W., Sharp, D. J., Harris, J. R., Woollery, T. A., & Harris, K. W. (2001). Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *American Journal of Preventive Medicine*(20), 16-66.
- Jernigan, D. H. (2001). *Global Status Report: Alcohol and Young People* (WHO/MSD/MSB/01.1). Geneva: WHO.
- Johnson, C. C., Li, D., Perry, C. L., Elder, J. P., Feldman, H., Kelder, S. H., & Stone, E. J. (2002). Fifth Through Eighth Grade Longitudinal Predictors of Tobacco Use Among a Racially Diverse Cohort: CATCH. *The Journal of School Health*, 72(2), 58-64.
- King, E., Ball, J., & Carroll, T. (2003). *Alcohol consumption patterns among Australian 15-17 year olds from February 2000 to February 2002*. Sydney: Department of Health and Ageing, Australian Government.
- Komro, K. A., Perry, C. L., Williams, C. L., Stigler, M. H., Farbaksh, K., & Veblen Mortenson, S. (2001). How did Project Northland reduce alcohol use among adolescents? Analysis of mediating variables. *Health Education Research*, 16(1), 59-70 FTXT: HighWire
<http://her.oupjournals.org/content/vol16/issue51/index.shtml>.
- Lister-Sharp, D., Chapman, S., Stewart-Brown, S., & Sowden, A. (1999). Health promoting schools and health promotion in schools: Two systematic reviews. *Health Technology Assessment*, 3(22), 1-207.
- Logan Beaudesert Health Service District. (2000). *'Rumble in the Jungle 2000' Karingal Scout Camp - Mt Cotton Report*. Logan/Beaudesert: Queensland Health.
- LoSciuto, L., Hilbert, S. M., Fox, M. M., Porcellini, L., & Lanphear, A. (1999). A two-year evaluation of the Woodrock Youth Development Project. *Journal of Early Adolescence*, 19(4), 488-507.
- Loxley, W., & Bolleter, A. (2003). Can illicit drug use be prevented in the community? The evaluation of the first two rounds of the community partnerships initiative. *Centre Lines*, August, 3.
- Mammino, R. (1993). *Alcohol and Drug Education in Queensland State Schools*. Brisbane: Educational Unit, Education Queensland.
- McDermott, L., Russel, A., & Dobson, A. (2002). *Cigarette smoking among women in Australia*. Canberra: Publications Productions Unit (Public Affairs, Parliamentary and Access Branch) Commonwealth Department of Health and Ageing.

- McMurray, A. (2003). *Community Health and Wellness: A Socioecological Approach*. Marrickville, NSW: Mosby.
- Ministerial Council on Drug Strategy. (1998). *National Drug Strategic Framework 1998-99 to 2002-03 Building Partnerships: A Strategy to Reduce the Harm Caused by Drugs in our Community*. Canberra: Commonwealth of Australia.
- Ministerial Council on Drug Strategy. (2001a). *National Alcohol Strategy: A Plan for Action 2001 to 2003-04*. Canberra: Commonwealth Department of Health and Aged Care.
- Ministerial Council on Drug Strategy. (2001b). *Alcohol in Australia: Issues and Strategies (A Background Paper to the National Alcohol Strategy: A Plan for Action 2001 to 2003/04)*. Canberra: Commonwealth Department of Health and Aged Care.
- Ministerial Council on Drug Strategy. (2001c). *National Action Plan on Illicit Drugs 2001 to 2002-03 (And Companion Documents - Background Paper and Summary Foldout)*. Canberra: Commonwealth Department of Health and Aged Care.
- Ministerial Council on Drug Strategy. (2003a). *National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006 and Companion Papers (Glossary, Background Paper and Summary)*. Canberra: Commonwealth of Australia.
- Ministerial Council on Drug Strategy. (2003b). *National Drug Strategy: Torres Strait and Northern Peninsula Area Complementary Action Plan 2003-2006 (Supplement to the Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006)*. Canberra: Commonwealth of Australia.
- Moon, L., Meyer, P., & Grau, J. (1999). *Australia's Young People: Their Health and Wellbeing 1999* (AIHW Cat No. PHE 19). Canberra: AIHW.
- Mrazek, P. J., & Haggerty, R. J. (Eds.). (1994). *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. Washington DC: Institute of Medicine National Academy Press.
- Munro, G., & Midford, R. (2001). Zero tolerance and drug education in Australian schools. *Drug and Alcohol Review*, 20, 105-109.
- National Crime Prevention. (1999). *Pathways to Prevention: Developmental and Early Intervention Approaches to Crime in Australia*. Canberra: National Crime Prevention, Commonwealth Attorney-General's Department.
- National Drug and Alcohol Research Centre. (2001). *Structural Determinants of Youth Drug Use*. Woden, ACT: Australian National Council on Drugs.
- National Health and Medical Research Council. (2000). *How to Review the Evidence: Systematic Identification and Review of the Scientific Literature*. Canberra: National Health and Medical Research Council (Available at <http://www.nhmrc.health.gov.au/publications/series.htm>).
- O'Connor-Fleming, M. L., & Parker, E. (2001). *Health Promotion: Principles and Practice in the Australian Context* (Second ed.). Crows Nest, NSW: Allen & Unwin.
- Organisation, W. H. (1997). *The Jakarta declaration on leading health promotion into the 21st century*. Geneva: World Health Organisation.
- Oxman, A. (1994). Checklists for Review Articles. *British Medical Journal*, 309, 648-651.

- Park, J., Kosterman, R., Hawkins, J. D., Haggerty, K. P., Duncan, T. E., Duncan, S. C., & Spoth, R. (2000). Effects of the "Preparing for the Drug Free Years" curriculum on growth in alcohol use and risk for alcohol use in early adolescence. *Prevention Science*, 1(3), 125-138.
- Peersman, G., Oakley, A., Oliver, S., & Thomas, J. (1996). *Review of Effectiveness of Sexual Health Promotion Interventions for Young People*. London: EPI-Centre, Social Science Research Unit.
- Peleg, A., Neumann, L., Friger, M., Peleg, R., & Sperber, A. D. (2001). Outcomes of a brief alcohol abuse prevention program for Israeli high school students. *Journal of Adolescent Health*, 28(4), 263-269.
- Perry, C. L., Komro, K. A., Veblen Mortenson, S., Bosma, L. M., Farbakhsh, K., Munson, K. A., Stigler, M. H., & Lytle, L. A. (2003). A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. *Archives of Pediatrics & Adolescent Medicine*, 157(2), 178-184.
- Perry, C. L., Williams, C. L., Komro, K. A., Veblen Mortenson, S., Stigler, M. H., Munson, K. A., Farbakhsh, K., Jones, R. M., & Forster, J. L. (2002). Project Northland: Long-term outcomes of community action to reduce adolescent alcohol use. *Health Education Research*, 17(1), 117-132.
- Peterson, A. V., Jr., Kealey, K. A., Mann, S. L., Marek, P. M., & Sarason, I. G. (2000). Hutchinson Smoking Prevention Project: Long-term randomized trial in school-based tobacco use prevention-Results on smoking. *Journal of the National Cancer Institute*, 92(24), 1979-1991.
- QE11 and Bayside Health Service Districts. (2000). *100% IN CONTROL Rumble in the Jungle Team Leader Professional Development Program, Evaluation Report*. Brisbane: Queensland Health.
- Queensland Government. (1999a). *Beyond a Quick Fix: Queensland Drug Strategic Framework 1999/2000 to 2003/2004*. Brisbane: Queensland Health.
- Queensland Government. (1999b). *Queensland Drug Summit - Focus on Youth: The Report*. Brisbane: Queensland Health.
- Queensland Government. (2002). *Meeting Challenges, Making Choices*. Brisbane: Queensland Government.
- Queensland Health. (1996). *Alcohol and Other Drug Use and People from Non-English Speaking Background: Policy Discussion Paper*. Brisbane: Alcohol Drugs & Tobacco Services, Queensland Health.
- Queensland Health. (2000). *Towards a Smoke-free Future: Queensland Tobacco Action Plan 2000/2001 to 2003/2004*. Brisbane: Queensland Health.
- Queensland Health. (2003). *Integrating Public Health Practices: A Position Statement on Community Capacity Development and the Social Determinants of Health for Public Health Services* (Position Statement). Brisbane: Queensland Health.
- Rehm, J. (1999). Review papers in substance abuse research. *Addiction*, 94(2), 173-176.
- Reid, A., Lynskey, M., & Copeland, J. (2000). Cannabis use among Australian adolescents: findings of the 1998 National Drug Strategy Household Survey. *Australian and New Zealand Journal of Public Health*, 24(6), 596-602.

- Research and Marketing Group, P. H. D. (2001). *Student Evaluation of the 2000 Croc Eisteddfod Festival - Weipa*: Commonwealth Department of Health and Aged Care.
- Roche, A. M., & Watt, K. (1999). Drinking and university students: from celebration to inebriation. *Drug and Alcohol Review*, 18, 389-399.
- Rooney, B. L., & Murray, D. M. (1996). A meta-analysis of smoking prevention programs after adjustment for errors in the unit of analysis. *Health Education Quarterly*, 23, 48-64.
- Roussos, S. T., & Fawcett, S. B. (2000). A review of collaborative partnerships as a strategy for improving community health. *Annual Review of Public Health*(21), 369-402.
- Schinke, S. P., Tepavac, L., & Cole, K. C. (2000). Preventing substance use among native american youth: three-year results. *Addictive Behaviours*, 2000(25), 3.
- Settortobulte, W., Jensen, B. B., & Hurrelmann, K. (2001). *Drinking among young Europeans*. Copenhagen: WHO Regional Office for Europe.
- Singer, L. T., Salvator, A., Arendt, R., Minnes, S., Farkas, K., & Kliegman, R. (2002). Effects of cocaine/polydrug exposure and maternal psychological distress on infant birth outcomes. *Neurotoxicology and Teratology*, 24, 127-135.
- Sowden, A., Arblaster, L., & Stead, L. (2003). Community Interventions For Preventing Smoking In Young People. *The Cochrane Library*(2).
- Sowden, A. J., & Arblaster, L. (2003). Mass media interventions for preventing smoking in young people. *The Cochrane Library*(2).
- Spoth, R., Redmond, C., & Shin, C. (2001). Randomized trial of brief family interventions for general populations: Adolescent substance use outcomes 4 years following baseline. *Journal of Consulting and Clinical Psychology*, 69(4), 1-15.
- Spoth, R., Redmond, C., Trudeau, L., & Shin, C. (2002). Longitudinal substance initiation outcomes for a universal preventive intervention combining family and school programs. *Psychology of Addictive Behaviors*, 16(2), 129-134.
- Spoth, R. L., Gyll, M., & Day, S. X. (2002). Universal family-focused interventions in alcohol-use disorder prevention: Cost-effectiveness and cost-benefit analyses of two interventions. *Journal of Studies on Alcohol*, 63(2), 219-228.
- Stanton, W. R., Carmont, S.-A. S., Ballard, R., & Lowe, J. B. (2000). *Alcohol, Cigarette and Illicit Drug Use among Year 7 to 12 Students in Queensland, 1999*. Brisbane: Centre for Health Promotion and Cancer Prevention Research, University of Queensland.
- Stanton, W. R., Gillespie, A., Baade, P., Ballard, R., & Lowe, J. B. (1994). *Cigarette and Alcohol Consumption Among Year 7 to 12 Students in Queensland, 1993*. Brisbane: Centre for Health Promotion and Cancer Prevention Research, University of Queensland.
- Stead, L. F., & Lancaster, T. (2003). Interventions for Preventing Tobacco Sales to Minors. *The Cochrane Library*(2).
- Storr, C. L., Ialongo, N. S., Kellam, S. G., & Anthony, J. C. (2002). A randomized controlled trial of two primary school intervention strategies to prevent early onset tobacco smoking. *Drug & Alcohol Dependence*, 66(1), 51-60.

- Success Works. (2003). *Evaluation of the National Drug Strategic Framework 1998-99 - 2003-04*: Commonwealth Department of Health and Ageing and Intergovernmental Committee on Drugs commissioned this evaluation.
- Sussman, S., Sun, P., McCuller, W. J., & Dent, C. W. (2003 article in press). Project towards no drug abuse: two-year outcomes of a trial that compares health educator delivery to self-destruction. *Preventative Medicine*.
- Swadi, H. (1999). Individual risk factors for adolescent substance use. *Drug and Alcohol Dependence*, 55, 209-224.
- Taylor, B. J., Graham, J. W., Cumsille, P., & Hansen, W. B. (2000). Modeling prevention program effects on growth in substance use: analysis of five years of data from the Adolescent Alcohol Prevention Trial. *Prevention Science*, 1(4), 183-197.
- The global youth network. (2003). *Drug Trends: drug use trends in Europe and the US*. The global youth network. Retrieved 10 October 2003, 2003, from the World Wide Web: <http://www.unodc.org/youthnet>
- Thomas, R. (2003). School-Based Programmes For Preventing Smoking. *The Cochrane Library*(2).
- Tobler, N. S., Roona, M. R., Ochshorn, P., Marshall, D. G., Streke, A. V., & Stackpole, K. M. (2000). School-based adolescent drug prevention programs: 1998 meta-analysis. *Journal of Primary Prevention*, 20(4), 275-336.
- Turner, C., Russel, A., & Brown, W. (2003). Prevalence of illicit drug use in young Australian women, patterns of use and associated risk factors. *Addiction*, 98, 1419-1426.
- United Nations. (1999). *Youth and drugs: a global overview* (E/CN.7/1999/8). Vienna: Commission on Narcotic Drugs.
- United Nations, E. a. S. C. (2003). *World Youth Report 2003* (E/CN.5/2003/4). New York: United Nations.
- United Nations Office for Drug Control and Crime Prevention. (2002). *Global Illicit Drug Trends 2002*. New York: United Nations Office for Drug Control and Crime Prevention.
- United Nations Office for Drug Control and Crime Prevention (UN ODCCP). (2002). *Global Illicit Drug Trends 2002* (No. E.02.XI.9). New York: UN ODCCP.
- Warren, C. W., Riley, L., Asma, S., Eriksen, M. P., Green, L., Blanton, C., Loo, C., Batchelor, S., & Yach, D. (2000). Tobacco use by youth: a surveillance report from the Global Youth Tobacco Survey project. *Bulletin of the World Health Organization*, 78(7), 868-876.
- Werch, C. E., Carlson, J. M., Pappas, D. M., Edgemon, P., & DiClemente, C. C. (2000). Effects of a brief alcohol preventive intervention for youth attending school sports physical examinations. *Substance Use and Misuse*, 35(3), 421-432.
- Werch, C. E., Owen, D. M., Carlson, J. M., DiClemente, C. C., Edgemon, P., & Moore, M. (2003). One-year follow-up results of the STARS for Families alcohol prevention program. *Health Education Research*, 18(1), 74-87.
- Werch, C. E., Pappas, D. M., Carlson, J. M., Edgemon, P., Sinder, J. A., & DiClemente, C. C. (2000). Evaluation of a brief alcohol prevention

- program for urban school youth. *American Journal of Health Behavior*, 24(2), 120-131.
- White, D., & Pitts, M. (1998). Educating young people about drugs: A systematic review. *Addiction*, 93(10), 1475-1487.
- White, V. (2001). *Australian secondary students' use of over-the-counter and illicit substances in 1999*. Canberra: Publications Production Unit (Public Affairs, Parliamentary and Access Branch) Commonwealth Department of Health and Aged Care.
- Wilkinson, R., & Marmot, M. (1998). *The solid facts*. Copenhagen: WHO Regional Office for Europe.
- Wodak, A., & Moore, T. (2002). *Modernising Australia's drug policy*. Sydney: UNSW Press.
- World Health Organisation. (1986). *The Ottawa Charter for Health promotion*. Geneva: Canadian Public Health Association.
- World Health Organization. (1997a). *Cannabis: a health perspective and research agenda* (WHO/MSA/PSA/97.4). Geneva: Division of Mental Health and Prevention of substance abuse, WHO.
- World Health Organization. (1997b). *The Jakarta Declaration on Leading Health Promotion into the 21st Century*. Geneva: World Health Organisation.
- World Health Organization. (1999). *Global Status Report on Alcohol*. Geneva: WHO.
- Youth Development Initiatives Group. (2001). *Battle of the Burnett Supported by 100% IN CONTROL Rumble in the Jungle*. North Burnett Shires: A cooperative initiative of the Monto Community Development Council Inc., North Burnett Health Service District, Mundubbera Community Development Association, Bundaberg Area Youth Services - Youth Options Program & the Queensland Government Youth Suicide Prevention Program.

APPENDIX A:

COLMAR BRUNTON REPORT

APPENDIX B:

SYSTEMATIC REVIEWS (COCHRANE)

SYSTEMATIC REVIEWS (COCHRANE)

Primary prevention for alcohol misuse in young people	
Citation	Foxcroft, D. R., Ireland, D., Lister-Sharp, D.J., Lowe G. & Breen, R. Primary prevention for alcohol misuse in young people (Cochrane Review). In: The Cochrane Library, Issue 2, 2003. Oxford: Update Software.
Topic of review	Educational and psychosocial interventions aimed at the primary prevention of alcohol misuse in young people. Main focus is assessment of the effectiveness of interventions over the longer term (>3 years).
Date of review	Most recent amendment May 2002; most recent substantive amendment February 2003
Number of studies	56
Participants	Young people under the age of 25 years
Settings	Family, school and community settings
Research design	<ul style="list-style-type: none"> - 41 Randomised Controlled Trials - 14 Non-randomised Control Group Designs - 1 Interrupted Time Series Design
Analysis	Results presented in tabular form, and as a systematic narrative synthesis structured by follow-up period
Major methodological limitations	<p>Two major methodological limitations:</p> <ul style="list-style-type: none"> - Not accounting for the difference between the unit of allocation (e.g. class, school or community) and unit of analysis (e.g. individual). This creates a positive bias towards intervention effects according to the within setting correlation and the number of respondents in each setting. - High levels of attrition, particularly those studies with longer-term follow-up.
Geographical region of studies	<p>US 47 (84%), Canada 3, Britain 2, Sweden 1, Norway 1, Australia 1, international study (Australia, Chile, Norway, Swaziland) 1</p> <p>Note: US tends to use abstinence model in interventions.</p>
Theoretical perspectives	A range of theoretical perspectives was represented, including knowledge-only programs, social learning, normative and multi-component community based interventions.
Outcome measures	Changes in drinking behaviour and alcohol related problems
Outcomes & characteristics of effective/ineffective interventions	<p>There was evidence of ineffectiveness in 20 of the 56 studies. Most studies were shown to have major methodological inadequacies. No conclusions could be made about effectiveness of interventions in the short or medium term. Interventions noted as showing promise, although requiring further evaluation, were:</p> <ul style="list-style-type: none"> - Strengthening Families Program (Spoth et al., 2001). Key components of the program were: Family-focused

Primary prevention for alcohol misuse in young people

interventions with Grade 6 children involving 7 family sessions once/week by two hours. “Parents and children taught to clarify expectations, appropriate discipline, manage strong emotions and communicate effectively. Children also taught peer skills” (Foxcroft et al., 2003 p. 47). The study showed evidence of a significant and increasing effect size over time.

- Culturally focused skills training (Schinke et al., 2000). Key components of the program were: Grade 3-5 children involved in skills-based group intervention in school and community settings. “Problem-solving, personal coping, interpersonal communication – all incorporating Native American myths, legends and stories.” (Foxcroft et al., 2003 p. 44).
- Community interventions which impact on a range of groups including youth. For example Holder’s (1997) community intervention trial targeting under-age alcohol purchases found alcohol related car crashes reduced by 10% amongst all drivers across three communities. Key components of the program were: “(i) enforcement of underage sales law; ii) retailer training and policy development; iii) media advocacy for enforcement efforts” (Foxcroft et al., 2003 p. 32).

Potential adverse effects:

At least six interventions appeared to increase drinking behaviour (relative to control groups) in the short or medium term. These interventions were not characteristically different from others described as partially effective or ineffective. The authors suggested that this “phenomenon may be artefact, due to poor design, method or analysis (e.g. post-hoc tests) and should therefore be interpreted cautiously” (Foxcroft et al., 2003 p. 8).

Mass media interventions for preventing smoking in young people	
Citation	Sowden, A. J. & Arblaster, F. Mass media interventions for preventing smoking in young people (Cochrane Review). In: The Cochrane Library, Issue 2, 2003. Oxford: Update Software.
Topic of Review	Mass media interventions for preventing the uptake of smoking in young people
Date of Review	Most recent amendment October 1999; most recent substantive amendment August 1998
Number of Studies	6
Participants	Young people under the age of 25 years (9-18 years)
Settings	Mass media is defined as “channels of communication such as television, radio, newspapers, bill boards, posters, leaflets or booklets intended to reach large numbers of people and which are not dependent on person to person contact” (Sowden & Arblaster, 2003, p. 3).
Research design	Randomised controlled trials, controlled trials without randomisation and time series studies
Analysis	Qualitative narrative synthesis
Major methodological limitations	A number of methodological limitations were noted, eg: <ul style="list-style-type: none"> - Between cluster variation, or not accounting for the difference between the unit of allocation (e.g. class, school or community) and unit of analysis (e.g. individual). This creates a positive bias towards intervention effects. - Differences at baseline between control and intervention groups. - The range of components making up the intervention was not controlled, thus providing “little information about which aspect of the campaign has the most impact within which group” (Sowden & Arblaster, 2003, p. 12).
Geographical Region of Studies	US 5 (84%); Norway 1 (16%)
Theoretical perspectives	Social learning theory (addresses motivations behind smoking and options for alternative behaviour); rational approach (information provision); developmentally-oriented affective approach (increasing self-esteem, decision-making and interpersonal skills); social norms approach (increasing self-esteem and reducing alienation).
Outcome measures	Primary measures of smoking behaviour were: <ul style="list-style-type: none"> - objective measures of smoking using chemical analysis - self-reported smoking behaviour Intermediate measures were also included, such as smoking attitudes, knowledge, intentions, skills and self-efficacy.
Outcomes & characteristics of effective/ineffective interventions	<ul style="list-style-type: none"> - “There is some evidence that the mass media can be effective in preventing the uptake of smoking in young people, but overall the evidence is not strong” (Sowden & Arblaster, 2003, p. 1). - Two of the six interventions found reduction in smoking behaviour. Hafstad (1997) found that a mass media

Mass media interventions for preventing smoking in young people

campaign was effective in reducing smoking in comparison to no intervention, and Flynn (1995, cited in Sowden & Arblaster, 2003) found that a mass media intervention was more effective than a school-based program alone. Both studies reported higher intensity and duration of the campaigns in comparison to the other studies with less significant findings (e.g. more than 160 TV, cinema or radio spots per year for 3–4 years). The two studies were underpinned by different theoretical models: Hafstad's (1997, cited in Sowden & Arblaster, 2003) intervention used provocative messages to achieve affective reactions, and Flynn's (1995, cited in Sowden & Arblaster, 2003) intervention was founded on social learning principles.

- Most of the studies allocated substantial time and resources to the development of intervention components, so this factor is not likely to explain lack of effectiveness.
- The authors recommended targeting high risk populations to decrease differences in the prevalence of smoking between males and females and different socio-economic groups.

Potential adverse effects

Not stated

Community interventions for preventing smoking in young people	
Citation	Sowden, A., Arblaster, L. & Stead, L. Community interventions for preventing smoking in young people (Cochrane Review). In: The Cochrane Library, Issue 2, 2003. Oxford: Update Software.
Topic of Review	The effectiveness of community interventions in preventing the uptake of smoking in young people
Date of Review	Most recent amendment/substantive amendment September 2002
Number of Studies	17
Participants	Young people under the age of 25 years
Settings	Interventions targeted at entire or parts of entire communities or large areas with the intention of influencing the smoking behaviour of young people. Community interventions are defined ‘...as co-ordinated, widespread programmes in a particular geographical area (e.g. school districts) or region or in groupings of people who share common interests or needs, which support non-smoking behaviour’ ” (Sowden, Arblaster, & Stead, 2003, p. 3).
Research design	“controlled trials randomising communities, geographical regions or school districts” and “controlled trials without randomisation, allocating communities, geographical regions or school districts” (Sowden, Arblaster, & Stead, 2003, p. 3)
Analysis	Qualitative narrative synthesis
Major methodological limitations	The authors noted the difficulty in evaluating community-wide programs for a range of reasons including: establishing adequate control groups; ensuring that outcomes are measured at the correct unit of analysis (i.e. the unit of analysis needs to be at the level of the community rather than the individual); the use of schools, as sampling units can limit generalisability of the findings to young people outside the school system; and difficulty in measuring implementation due to the large size of the community interventions (often requires qualitative research methods).
Geographical Region of Studies	US 11 (65%), UK 3 (18%), Australia 2 (12%), Finland 1 (5%)
Theoretical perspectives	Social learning theory, social influences approach, stages of change theory, communication theories, community/organisation change theories, community empowerment and participatory research
Outcome measures	Primary measures of smoking behaviour were objective measures using chemical analysis and self-report. Intermediate outcome measures included knowledge about the consequences of smoking, attitudes to smoking and intention to smoke in the future. Process measures were also included in some studies e.g. details of implementation and memberships of anti-smoking clubs for young people.
Outcomes & characteristics of effective/ineffective interventions	<ul style="list-style-type: none"> - The authors concluded that there is “some limited support for the effectiveness of community interventions in helping prevent the uptake of smoking in young people” (Sowden, Arblaster, & Stead, 2003, p. 1). - Two of the 12 evaluations comparing community-wide interventions with no intervention controls reported difference in smoking prevalence between the intervention and control groups. These were both cardiovascular disease

Community interventions for preventing smoking in young people

prevention programs (Perry, Kelder & Klepp, 1994; Vartiainen et al, 1998).

- One in four studies comparing community interventions to school-based programs alone reported differences in smoking prevalence (Biglan, 2000 cited in Sowden, Arblaster, & Stead, 2003).
- Two studies reported differences in smoking prevalence between a multi-component intervention with a community compared with a mass media campaign alone (Kaufman et al, 1994; Pentz et al, 1989).
- The authors noted characteristics to be considered when planning community programs including: building upon elements of programs that have been found effective; ensuring program flexibility to allow for variability between communities; undertaking sufficient developmental work with representatives from the target population to develop appropriate activities and messages; using theoretical constructs to guide program activities; and ensuring community activities reach the intended audience.

Potential adverse effects

Not reported

Interventions for preventing tobacco sales to minors	
Citation	Stead, L. F. & Lancaster, T. Interventions for preventing tobacco sales to minors (Cochrane Review). In: The Cochrane Library, Issue 2, 2003. Oxford: Update Software.
Topic of Review	Interventions for preventing tobacco sales to minors
Date of Review	Most recent amendment/substantive amendment October 2001
Number of Studies	30 studies met the inclusion criteria and 13 used some form of control group
Participants	Tobacco retail outlets, school students
Settings	Specific geographical areas e.g. communities, cities, towns, counties, areas in which health units/schools were based
Research design	Randomised controlled trials; controlled trials without randomisation; time series studies; uncontrolled before and after studies
Analysis	Qualitative narrative synthesis
Major methodological limitations	These included: clustering of behaviour within communities; and measurement of the outcome of retailer compliance with the law i.e., whether the outcome measure was refusal of a single purchase attempt by a young person or refusal of multiple purchase attempts.
Geographical Region of Studies	US 19 (63%), Australia 6 (20%), UK 3 (10%), Canada 2 (7%)
Theoretical perspectives	Not stated
Outcome measures	Attempted purchase of tobacco by young people; perceived ease of access to cigarettes by young people; prevalence of tobacco use among young people

Interventions for preventing tobacco sales to minors

Outcomes & characteristics of effective/ineffective interventions

- “Giving retailers information was less effective in reducing illegal sales than active enforcement and/or multicomponent educational strategies. No strategy achieved complete, sustained compliance. In three controlled trials, there was little effect of intervention on youth perceptions of access or prevalence of smoking” (Stead & Lancaster, 2003, p. 1).
- Six of the 11 controlled trials found that intervention reduced the number of illegal sales to minors in comparison to the control group. Three out of seven studies found that intervention was associated with decreased self-reported ease of access for young people. Three out of five controlled trials found that the intervention decreased smoking behaviour.
- Intervention consisting only of information to retailers about the law re tobacco sales to minors is not effective. Successful interventions require a range of strategies such as personal visits and mobilising community support.
- Enforcement and warnings of enforcement were successful interventions, although regular enforcement is required to sustain compliance.
- “Although the potential for enforcement of sales laws to reduce underage smoking may be limited, a recent cost effectiveness analysis suggested that even if it can only reduce youth tobacco use by 5% it is likely to be as cost effective as other prevention activities” (DiFranza, 2001b cited in Stead & Lancaster, 2003,p. 8).
- “Legislation alone is not sufficient to prevent tobacco sales to minors. Both enforcement and community policies improve compliance by retailers, but the impact on underage smoking prevalence using these approaches alone may be small if the level of compliance attained does not sufficiently restrict access” (Stead & Lancaster, 2003, p. 8).

Potential adverse effects

Enforcement strategies risk a backlash against tobacco control activities if community attitudes are not supportive.

School-based programs for preventing smoking	
Citation	Thomas, R. School-based programmes for preventing smoking (Cochrane Review). In The Cochrane Library, Issue 2, 2003. Oxford: Update Software.
Topic of Review	“Behavioural interventions in schools to prevent children (aged 5 to 12) and adolescents (aged 13-18) starting smoking” (Thomas , 2003, p. 1)
Date of Review	January 2002
Number of Studies	76, with 16 classified as category one (most valid)
Participants	Children (aged 5-12) or adolescents (aged 13-18)
Settings	School settings
Research design	“Studies in which individual students, classes, schools, or school districts were randomised to the intervention or control groups and followed for at least six months” (Thomas , 2003, p. 1)
Analysis	Narrative systematic review, grouped by intervention method. Studies were categorised into three groups according to methodological strength.
Major methodological limitations	Major methodological difficulties included: ensuring the statistical analysis models the effects of clustering in classes/schools; respondent attrition, using consistent measures of smoking behaviour, duration and completeness of follow-up; and ensuring consistent implementation of the intervention.
Geographical Region of Studies	US 54 (71%), Canada 4 (5%), Australia 3 (4%), Germany 3 (4%), Italy 3 (4%), Netherlands 3 (4%), Norway 2 (3%), UK 2 (3%), Mexico 1 (1%), Spain 1 (1%)
Theoretical perspectives	The types of intervention were categorised according to the theoretical orientation i.e., information-giving curricula, social competence curricula, social influence approaches including tobacco resistance and refusal skills, combined social influences/social competence programs, and multi-modal programs.
Outcome measures	Prevalence of non-smoking at follow-up among students who were not smoking at baseline. A minimum follow-up of six months after intervention was required.

School-based programs for preventing smoking

Outcomes & characteristics of effective/ineffective interventions

- Fifteen of the 16 category one trials drew on social influence models. Of these “eight showed some positive effect of intervention on smoking prevalence, and seven failed to detect an effect on smoking prevalence” (Thomas , 2003, p. 1).
- The most rigorous and largest study, the Hutchinson Smoking Prevention Project, found no long-term effect on smoking behaviour (Peterson et al., 2000). This was an intensive 8 year program in which students received 65 intervention sessions drawing on best practice recommendations for social influence programs.
- There is some evidence that short-term effects on smoking behaviour can be achieved using school programs incorporating social influence models.
- “There is a lack of high quality evidence about the effectiveness of combinations of social influences and social competence interventions, and multi-modal programs that include community interventions” (Thomas , 2003, p. 2). The author noted that combining social influence models with other components (e.g. community interventions and generic social competence training) may improve effectiveness.
- The effects of information-giving about smoking alone has not been rigorously tested, and there is little positive available evidence to support this approach.
- The findings from this systematic review are more cautious than those reported in earlier meta-analyses (Rooney & Murray, 1996; Tobler et al., 2000). This is due to the change in the evidence base in which a number of studies fail to find a long-term effect.
- Both evidence of effectiveness and costs of implementing the program need to be considered when deciding whether to implement a specific intervention

Potential adverse effects

Not stated.

Effectiveness of laws restricting youth access to cigarettes	
Citation	Fichtenberg, C. M. & Glantz, S. A. (2002). Youth access interventions do not affect youth smoking. <i>Pediatrics</i> , 109(6), 1088-1109
Topic of Review	The effectiveness of laws restricting youth access to cigarettes on prevalence of smoking in teenagers
Date of Review	Studies included in the review were published from 1991 to 2001
Number of Studies	8
Participants	Young people aged between 12 and 17 years
Settings	Not reported
Research design	Studies which included data on compliance with youth access laws and prevalence of teenage smoking
Analysis	Computation of the correlation between teen smoking prevalence and merchant compliance with youth access laws at baseline and follow-up, and in intervention and control communities
Major methodological limitations	Small number of controlled studies evaluating the effects of youth access interventions on smoking prevalence in young people
Geographical Region of Studies	Not stated (US focus)
Theoretical perspectives	Not stated
Outcome measures	<ul style="list-style-type: none"> - Tobacco merchant compliance measure – refusal to sell cigarettes to underage youth. - Smoking prevalence – pooled into two main groups: “30 day smoking” (smoking in the last 30 days) and “regular smoking”

Effectiveness of laws restricting youth access to cigarettes

Outcomes & characteristics of effective/ineffective interventions

- The review found no statistically significant relationships between merchant compliance and teen smoking prevalence (either “30-day” or “regular” smoking)
- There were no statistically significant differences in youth smoking prevalence in communities with interventions to control youth access to tobacco in comparison with control communities without such interventions.
- The authors argued that there was no evidence for a threshold for merchant compliance which would produce a consistent decrease in smoking prevalence.
- There is evidence that young people increase their access to cigarettes through “social sources” (e.g. parents, friends, strangers, stealing) rather than commercial sources, following interventions to restrict access through merchants.
- “Given the limited resources available for tobacco control, as well as the expense of conducting youth access programs, tobacco control advocates should abandon this strategy and devote the limited resources that are available for tobacco control toward other interventions with proven effectiveness” (Fichtenberg & Glantz, 2002, p. 1).

Potential adverse effects

- While the authors note that correlations between merchant compliance and smoking prevalence in teenagers were not statistically significant, they commented: “it is interesting to note that their sign indicates a positive association between increased compliance and increased smoking prevalence, which is opposite of the desired effect of these laws” (Fichtenberg & Glantz, 2002, p. 4).
 - The authors argued that interventions attempting to restrict teenagers’ access to “social” sources of tobacco could create unwanted consequences such as reinforcing “the tobacco industry’s efforts to present tobacco control advocates as unreasonable and extremist... (and) shift the focus of tobacco control efforts further away from the tobacco industry and its marketing practices” (Fichtenberg & Glantz, 2002, p. 4).
 - Youth access interventions have the potential to reinforce the message that if young people smoke they will appear more “adult”.
-

Interventions to reduce smoking and exposure to environmental tobacco smoke	
Citation	Hopkins, D. P., Briss, P. A., Ricard, C. J., Husten, C. G., Carande-Kulis, V. G., Fielding, J. E., Alao, M. O., McKenna, J. W., Sharp, D. J., Harris, J. R., Woollery, T. A. & Harris, K. W. (2001). Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. <i>American Journal of Preventive Medicine</i> , 20 (2S), 16-66.
Topic of Review:	Interventions to reduce tobacco use and exposure to environmental tobacco smoke
Date of Review:	Published 2001
Number of Studies	Evidence reviews of 14 interventions
Participants	Not reported for each study
Settings	Not reported for each study
Research design	Evidence reviews were organised into three sections: “(1) strategies to reduce exposure to ETS (environmental tobacco smoke); (2) strategies to reduce tobacco use initiation; and (3) strategies to increase tobacco use cessation” (Hopkins et al, 2001, p. 19). Studies included in the analysis were concurrent comparison groups and prospective measure of exposure and outcome, retrospective designs, and multiple before or after measurements but no concurrent comparison group. Percentage point changes in tobacco use behaviours were calculated for each study.
Analysis	Narrative synthesis
Major methodological limitations:	Research issues for each of the areas of interest were listed in detail. A major theme was difficulty in establishing effectiveness of different components within an intervention, as well as differences in the effectiveness of interventions for specific sub-groups in the population.
Geographical Region of Studies	Breakdown on geographical region of each study is unclear; however, primary focus is on US studies.
Theoretical perspectives	Not reported
Outcome measures	Self-reported exposure to ETS, self-reported tobacco use behaviours, population measurements of tobacco product consumption

Interventions to reduce smoking and exposure to environmental tobacco smoke

Outcomes & characteristics of effective/ineffective interventions

- “there is strong scientific evidence that smoking bans and restrictions reduce exposure to ETS in the workplace” (Hopkins et al, 2001, p. 90)
- “evidence of effectiveness of education strategies in reducing exposure to ETS in the home environment is insufficient because of the small number of available studies and limitations in the design and execution of available studies” (Hopkins et al, 2001, p. 23)
- “strong scientific evidence demonstrates the effectiveness of increasing the price of tobacco products on reducing tobacco use prevalence and consumption among both adolescents and young adults” (Hopkins et al, 2001, p. 25). There is also evidence that increasing tobacco prices reduces tobacco consumption and increases cessation. (Hopkins et al, 2001, p. 30).
- “strong scientific evidence exists that mass media campaigns are effective in reducing tobacco use prevalence in adolescents when combined with other interventions. The contribution of individual components to the overall effectiveness of these interventions cannot be attributed” (Hopkins et al, 2001, p. 27). Mass media campaigns combined with other interventions were also reported to be effective in reducing tobacco consumption and increasing cessation.
- There is insufficient evidence about the effectiveness of cessation series in reducing tobacco use, due to both inconsistent results across studies and inadequate study design. Cessation series are “mass media interventions that use recurring instructional segments to recruit, inform, and motivate tobacco product users to initiate and to maintain cessation efforts” (Hopkins et al, 2001, p. 32).

Potential adverse effects

Not reported

Health promotion in schools	
Citation	Lister-Sharp, D., Chapman, S., Stewart-Brown, S. & Sowden, A. (1999). Health promoting schools and health promotion in schools: Two systematic reviews. <i>Health Technology Assessment</i> , 3(22) pp. 41-60.
Topic of Review	Identification and appraisal of systematic reviews on the effectiveness of health promotion in schools
Date of Review	Publication date 1999
Number of Studies	Nine reviews considered substance use and 146 primary studies were included in the reviews.
Participants	“Reviewed interventions covered the age range 8-17 years, but the majority were for children and young people aged 10-13 years” (Lister-Sharp et al, 1999, p. 46).
Settings	Schools
Research design	The reviews were required to include at least one experimental study (controlled trial or before-and-after trial) and to take a population approach (not a high risk or secondary preventive approach).
Analysis	Narrative synthesis
Major methodological limitations	Limitations included: lack of long-term follow-up and high attrition rates in some studies; inconsistency between reviews in describing the allocation of intervention and control groups; issues linked to the relationships between units of allocation and data analysis; lack of data on effect sizes; failure to report impacts on broader health outcomes (e.g. mental health or psychological risk factors for substance misuse); and the limited capacity of systematic reviews to explain the reasons for less effective programs.
Geographical Region of Studies	The majority of studies took place in the US.
Theoretical perspectives	<ul style="list-style-type: none"> - Around a third of the primary studies did not report the theoretical orientation. The majority of those reported were derived from social psychology (e.g. social learning theory and social influences) and health psychology (e.g. the health action and health belief models). Others included problem behaviour and coping behaviour theories. - Curricular components in the interventions included: information (80%), resistance skills (52%), decision-making skills (34%), life skills development (21%), values clarification (18%), norm setting (15%), stress management and self-esteem development (13%), alternatives (11%), pledge (10%), assistance (7%) and goal setting (6%).
Outcome measures	Self-reported substance use behaviour as well as wider outcomes (e.g. knowledge, attitudes, intentions, self-esteem)

Health promotion in schools

Outcomes & characteristics of effective/ineffective interventions

- Alcohol prevention programs: Overall effectiveness of alcohol prevention programs was found in 25 out of 63 programs overall. Peer interventions appeared to be more effective (with 10 out of 13 showing some effect on short-term behaviour, two with no effect, and one with a counterproductive effect). Other components with some evidence of effectiveness were resistance skills, stress management and/or norm setting, and inclusion of parents in the program.
- Tobacco programs: Tobacco interventions involving peers compared well with non-peer interventions (of 15 studies of interventions involving peers, 13 showed some effect, one no effect and one a negative effect). The majority of interventions with an impact on short-term tobacco use behaviour included resistance skills training. The benefits of involving parents in interventions was unclear (of four programs involving parents only, one showed an effect, two showed no effect and smoking rates increased in one program).
- Marijuana and drug misuse programs: There was evidence of the effectiveness of peer interventions (of eight studies involving peers, five found some impact on short-term behaviour, two found no effect, and one had a negative effect). “This compares favourably with the overall results for these programmes combined in which 14 had some impact, 17 had none and one had a negative effect” (Lister-Sharp et al, 1999, p. 50). Resistance skills training and norm setting were common components in successful programs. Involving parents in drug misuse programs appeared to enhance effectiveness, with all four programs showing some impact on behaviour.
- Long-term impacts: Overall, programs appear to have some impact on the initiation of substance use; however, there is less evidence that they provide long-term impacts.
- Impacts of specific components on behaviours: “Although successful programmes were more likely to include resistance skills training and norm setting, two reviews focusing specifically on the effectiveness of resistance and social skills training found that these approaches could not be guaranteed to be effective” (Lister-Sharp et al, 1999, p. 50). Although peer involvement was more likely to be associated with success, this also was not guaranteed. There were insufficient numbers of programs involving parents to compare the effectiveness of this component with interventions not involving parents. In the majority of interventions involving parents and community, those showing an impact were underpinned by social psychological theories (e.g. social learning theory).

Potential adverse effects

A small number of smoking and drug misuse programs were associated with an increase in tobacco/drug use.

Educating young people about drugs	
Citation	White, D. & Pitts, M. (1998). Educating young people about drugs: A systematic review. <i>Addiction</i> , 93(10), 1475-1487.
Topic of Review	Drug education for young people
Date of Review	Publication date 1998
Number of Studies	71 (62 program evaluations)
Participants	Young people aged between 8 and 25 years
Settings	Schools and colleges, community settings, the family, medical/therapeutic settings, mass media
Research design	Studies were included if they reported on outcomes relating to substance using behaviours, subject refusal and attrition rates, comparisons of baseline data and follow-up beyond the end of the program.
Analysis	Narrative synthesis, and meta-analysis of data from methodologically sound studies
Major methodological limitations	Methodological limitations included: insufficient evaluation of interventions targeting hard to reach groups; over-reliance on self reported drug use; most program evaluations did not report whether the intervention was delivered with fidelity; difficulty in evaluating the effectiveness of specific components of the interventions; and lack of research on different stages in drug use particularly for the years following the end of schooling.
Geographical Region of Studies	90% from USA, Australia 3, Britain 2, Israel 1
Theoretical perspectives	- Not formally reported; however, the following statement provides some clarification: “Most commonly both the effective and ineffective interventions incorporated a number of elements which aimed to increase knowledge of the effects of different substances and of the potential harm associated with them, to change beliefs about the prevalence of drug use, to provide the skills to resist the pressures to use drugs, to provide peer support and modelling, enhancement of self-esteem and provision of alternative strategies for gaining peer approval and personal reinforcement and improved attitudes to abstinence” (White & Pitts, 1998, pp. 1479-1482).
Outcome measures	Drug using behaviours

Educating young people about drugs

Outcomes & characteristics of effective/ineffective interventions

- “The majority of studies identified were evaluations of interventions introduced in schools and targeting alcohol, tobacco and marijuana simultaneously. These studies were methodologically stronger than interventions targeting other drugs and implemented outside schools. Meta-analyses showed that the impact of evaluated interventions was small with dissipation of program gains over time.”
- 18 of 62 studies (29%) found evidence of program effectiveness. The effect size of studies with follow-up to one year was 0.037 (i.e., “3.7% of young people who would use drugs delay their onset of use or are persuaded to never use” (White & Pitts, 1998, p. 1484)).
- “The available evidence suggests that the best that can be achieved using currently evaluated school-based intervention strategies is a short-term delay in the onset of substance use by non-users and a short-term reduction in the amount of use by some current users” (White & Pitts, 1998, p. 1484).
- Features of the majority of effective programs included: booster sessions (or program elements to regularly reinforce messages), intensive programs involving substantial curriculum time (10 or more sessions) and community-wide interventions that reinforce the messages of school-based interventions

Potential adverse effects

“The studies were fairly consistent in showing that modern drugs education messages are rarely counter-productive” (White & Pitts, 1998, p. 1479).

APPENDIX C:

PRIMARY STUDIES

PRIMARY STUDIES

Author	Aseltine, R. H., Dupre, M. & Lamlein, P. (2000) Mentoring as a drug prevention strategy: An evaluation of Across Ages. <i>Adolescent and Family Health</i> , 1 (1) 11-20.
Study design	Randomised controlled trial comparing mentoring program with other interventions
Participants	Grade 6 school students
Intervention focus	Problem behaviour (alcohol & marijuana use), knowledge of/attitudes towards Alcohol, Tobacco and Other Drugs (ATOD) use, personal and social resources, school outcomes
Intervention type	Comparison of mentoring program ('Across Ages'), community service activities, and school-based life skills curriculum
Duration of intervention	Two cohorts over two years involving intervention during one school year (7 to 8 months) program
Follow-up	Assessment at baseline, program conclusion and six months later
Original N	505
Mean age	Not reported - (Grade 6 school students)
Gender	Not reported - male and female students?)
Ethnicity	Ethnically diverse and low income community in Massachusetts, US
Attrition rate	29.1% (not reported for each group)
Final sample size	358
Key components	Mentoring program in which middle school students are matched with adults who provide ongoing support and encouragement in weekly interactions
Outcomes	Mentoring is associated with significantly lower levels of alcohol use and substance use. However, the effect sizes indicate only moderate program effects, and almost all program effects were no longer apparent 6 months after program cessation.
Other impacts.	Mentoring is also associated with lower levels of problem behaviour and higher levels of self-confidence, self-control, cooperation, and attachment to school and family.
Quality score	Sound - attrition rates for each group were unclear

Author	Aveyard, P., Sherrat, E., Almond, J., Lawrence, T., Lancashire, R., Griffin, C. & Cheng, K. (2001) The change-in-stage and updated smoking status results from a cluster-randomized trial of smoking prevention and cessation using the transtheoretical model among British adolescents. <i>Prev Med</i> , 33 (4) 313-24.
Study design	Randomised controlled trial, involving transtheoretical model (TTM) intervention or control (standard national curriculum in the UK)
Participants	Year 9 students across 26 schools (ages 13 to 14 years)
Intervention focus	Smoking prevention and cessation program in schools using the transtheoretical model (TTM)
Intervention type	TTM intervention involved three class lessons and three sessions with an interactive computer program (both with content oriented towards decisional balance)
Duration of intervention	Three class lessons and three sessions with an interactive computer program
Follow-up	Follow-up at baseline, one year and two years
Original N	8352
Mean age	13 to 14 years
Gender	Not reported (male and female students?)
Ethnicity	UK based
Attrition rate	At one year follow-up 89.3% and 89.0% of TTM and control group respectively were present. At two year follow-up 86.0% and 77.4% respectively were present.
Final sample size	6819
Key components.	Three classroom lessons lasting one hour each, and three sessions with the computer intervention (giving feedback about temptations, decisional balance, and stages and processes of change) lasting less 40 minutes in total.
Outcomes	No significant differences between subgroups for smoking prevention or cessation were found following intervention at either one or two year follow-up. The intervention was considered to be ineffective.
Other impacts	Not reported
Quality score	Sound

Author	Bauman, K. E., Vangie, A. F., Ennett, S. T., Pemberton, M., Hicks, K. A., King, T. S., & Koch, G. G. (2001) The influence of a family program on adolescent tobacco and alcohol use. <i>American Journal of Public Health</i> , 91 (4) 604-610.
Study design	Randomised controlled trial comparing families who did/did not receive family-directed program
Participants	Young people aged 12 to 14 years and at least one parent
Intervention focus	Impact of a family-directed program to prevent alcohol and tobacco use
Intervention type	Intervention involved receiving a family-directed program involving mailed booklets and telephone contact with a health educator ('Family Matters')
Duration of intervention	Not reported (*this information is available in second paper described on following page)
Follow-up	Follow-up at three months and one year after intervention
Original N	1316
Mean age	not reported, 12 to 14 year olds
Gender	not reported
Ethnicity	US-based - four categories (non-Hispanic White, non-Hispanic Black, Hispanic and other) were collapsed to non-Hispanic White or other
Attrition rate	Of 1316 baseline parent-adolescent pairs, 1135 (86.2%) completed either the first or second follow-up. 1014 (77.1% completed both follow-up interviews). Attrition rate for each group was unclear.
Final sample size	1014
Key components	Mailing four booklets in succession to families and telephone discussions with health educators following each mailing. Communication (between family members and with health educators) is core process in intervention.
Outcomes	Statistically significant reduction in smoking onset was found for people from non-Hispanic White backgrounds (reduction 16.4% overall at one year, with 25% reduction for non-Hispanic Whites but no effect for other ethnicities). No statistically significant effects were found for the onset of alcohol use or smokeless tobacco. The analysis examined the onset and cessation of tobacco and alcohol use in users and non-users separately.
Other impacts	Not reported
Quality score	Sound - attrition rates for each group were unclear.

Author	Bauman, K. E., Ennett, S. T., Foshee, V. A., Pemberton, M., King, T. S. & Koch, G. G. (2002) Influence of a family program on adolescent smoking and drinking prevalence. <i>Prev Sci</i> , 3 (1) 35-42.
Study design	Randomised controlled trial comparing families who did/did not receive family-directed program
Participants	12 to 14 year olds and at least one parent
Intervention focus	Impact of a family-directed program on prevalence of adolescent alcohol and tobacco use
Intervention type	Intervention involved receiving a family-directed program involving mailed booklets and telephone contact with a health educator ('Family Matters')
Duration of intervention	Average of approximately 15 weeks between first call by health educator and program completion. Families that completed four units required average of approximately six months. Health educator averaged 45.2 telephone calls per family, and spoke to each parent average 8.4 times.
Follow-up	Follow-up at 3 and 12 months after program cessation
Original N	658 families - (1316 adolescents and their parents)
Mean age	13.9 years
Gender	50.7% female, 49.3% male
Ethnicity	US-based - 78% non-Hispanic white
Attrition rate	1135 (86.2%) completed one or both follow-ups (attrition rate for each group were unclear)
Final sample size	1135
Key components	Mailing four booklets in succession to families and telephone discussions with health educators following each mailing. The booklet content was guided by a number of social and behavioural science theories.
Outcomes	Statistically significant effects of the intervention were found for both tobacco and alcohol use, suggesting that the program reduced the prevalence of these behaviours. The effect sizes are modest. This analysis included both nonusers and users to examine intervention effects on the prevalence of tobacco and alcohol use (this produced an increase in statistical power through an increase in sample size).
Other impacts	Not reported
Quality score	Sound – attrition rates for each group were unclear.

Author	Botvin, G. J., Griffin, K. W., Diaz, T. & Ifill-Williams, M. (2001) Drug abuse prevention among minority adolescents: posttest and one-year follow-up of a school-based preventive intervention. <i>Preventive Science</i> , 2 (1) 1-13.
Study design	Randomised controlled trial comparing school-based drug abuse preventive intervention with control
Participants	Minority students in 29 New York City schools
Intervention focus	Drug abuse prevention among minority adolescents
Intervention type	School-based program involving a cognitive behavioural approach ('Life Skills Training')
Duration of intervention	15 sessions in Grade 7 and 10 booster sessions in Grade 8
Follow-up	Three months after intervention, and one year after post-test
Original N	5222
Mean age	12.9 years (Grades 7 and 8)
Gender	53% female, 47% male
Ethnicity	61% African American, 22% Hispanic, 6% Asian, 6% White, 5% Other. Economically disadvantaged youth from predominantly low socioeconomic status.
Attrition rate	69% provided data at pre and post-test and one- year follow-up. Attrition analysis showed that students who used substances at baseline were less likely to be included in the follow-up assessment.
Final sample size	3621
Key components	Classroom sessions taught by the classroom teacher involving drug refusal skills, anti-drug norms, self-management skills and social skills
Outcomes	Students who received the program reported reduced tobacco, alcohol, polydrug and inhalant use relative to controls after oneyear follow-up.
Other impacts	Students who received the program also scored better on a number of variables hypothesised to mediate substance use (e.g. intentions, knowledge and expectations about substance use, risk taking, problem behaviour in school and drug refusal).
Quality score	Sound

Author	Brown, K. S., Cameron, R., Madill, C., Payne, M. E., Filsinger, S., Manske, S. R. & Best, J. A. (2002) Outcome evaluation of a high school smoking reduction intervention based on extracurricular activities. <i>Prev Med</i> , 35 (5) 506-10.
Study design	Randomised controlled trial comparing elementary school smoking prevention curriculum with control
Participants	Grade 9 and 10 secondary school students
Intervention focus	High school smoking reduction intervention based on extracurricular activities
Intervention type	Interventions focused on extracurricular approaches, in which students were encouraged to participate in activities inconsistent with smoking. Activities included contests, displays, health fairs, assemblies and smoking surveys.
Duration of intervention	Average of 3.8 intervention activities in Grade 9 and 3.5 in Grade 10.
Follow-up	Data collected end of Grades 9 and 10
Original N	3028
Mean age	Not reported (Grades 9 & 10)
Gender	Not reported (male and female?)
Ethnicity	Canada-based study
Attrition rate	12.7% - no differential attrition across conditions
Final sample size	2643
Key components	Emphasis on youth leadership in planning and implementing the smoking interventions and treating the student body of each school as a community
Outcomes	Regular smoking rates were significantly lower for male Grade 8 'never smokers' following intervention. No significant differences were found among smoking rates for females, or for students who had previous smoking experience in Grade 8.
Other impacts	Not reported
Quality score	Sound

Author	Bryson, R. (1999) Effectiveness of refusal skills software. <i>Journal of Drug Education</i> , 29 (4) 359-371.
Study design	Randomised controlled trial comparing computer-based refusal skills training and control group
Participants	Grade 8 school students
Intervention focus	Computer aided software program targeting refusal skills training (including a range of substance use scenarios as well as other challenges for young people)
Intervention type	Social skills computer program 'Refusal Challenges'
Duration of intervention	Approximately one hour/day over two days
Follow-up	One to two days after intervention, and six months after intervention
Original N	188
Mean age	not reported, Grade 8 students
Gender	52% females, 48% males
Ethnicity	US based - students in a rural Southern California middle school, majority Hispanic backgrounds
Attrition rate	Not clearly reported for six month follow-up
Final sample size	182
Key components	Properly designed computer software
Outcomes	Students receiving the intervention had significantly improved refusal skills compared with the control group at both post-test and follow-up testing.
Other impacts	Refusal skills included a range of risk situations linked to substance use (e.g. smoking cigarettes, drinking beer) and other social situations (e.g. writing graffiti, fighting).
Quality score	Sound – attrition rates for each group were unclear

Author	D'Amico, E. J. & Fromme, K. (2002) Brief prevention for adolescent risk-taking behavior. <i>Addiction</i> , 97 (5) 563-574.
Study design	Randomised controlled trial comparing Drug Abuse and Resistance Education (DARE-A), Risk Skills Training Program (RSTP) and control group
Participants	School students in mid-sized suburban high school aged 14 to 19 years
Intervention focus	Prevention intervention to decrease adolescent risk-taking, substance use and driving after drinking
Intervention type	Comparison of a version of an abbreviated Drug Abuse and Resistance Education (DARE-A) with a Risk Skills Training Program (RSTP)
Duration of intervention	Both interventions took approximately 50 minutes
Follow-up	Two month post-test and six month follow-up assessments
Original N	300
Mean age	16
Gender	58% females, 42% males
Ethnicity	US-based study – 63% Caucasian, 17% Hispanic, 10% African-American, 2% Asian, 8% other
Attrition rate	38.7% overall. More control group participants dropped out at post-test and no significant differences in attrition rates between groups were evident at follow-up.
Final sample size	184
Key components	DARE-A is a brief, didactic education based program, led by a police officer. RSTP is a brief, interactive, personalised, motivational based program which targets substance use, drink driving and riding with a drunk driver.
Outcomes	At two-month post-test RSTP students decreased participation in heavy drinking, driving after drinking and riding with a drunk driver, although this was not maintained six months later. The control group increased alcohol consumption at six month follow-up.
Other impacts	Both the control and DARE-A groups increased their positive and decreased their negative alcohol expectancies at follow-up.
Quality score	Sound

Author	Dent, C. W., Sussman, S. & Stacy, A. (2001) Project towards no drug abuse: Generalizability to a general high school sample. <i>Preventive Medicine</i> , 32 (6) 514-520.
Study design	Randomised controlled trial comparing classroom-based prevention program with control group
Participants	14 to 17 year old students in a general public high school
Intervention focus	Substance use prevention program in general high schools
Intervention type	Classroom based program ('Project Towards No Drug Abuse') developed for youth at alternative (high risk) high schools
Duration of intervention	Nine session classroom based program consisting of three 50 minute sessions per week for three consecutive weeks
Follow-up	One year follow-up
Original N	1208
Mean age	Not reported. 35% in Grade 9, 43% in Grade 10, and 22% in Grade 11 at baseline.
Gender	47% male, 53% female
Ethnicity	US-based study – 34% white, 38% Latino, 26% African American, 2% other
Attrition rate	27% overall. No differences in attrition rates between groups.
Final sample size	679
Key components	The program was underpinned by a health motivation — personal and social skills — decision-making model (in contrast to a social influences model).
Outcomes	Students receiving the intervention reduced illicit drug use at one year follow-up. Students with higher pre-test alcohol use reduced their use at follow-up. No differences were found for tobacco or marijuana use. These findings replicate an earlier study of the intervention on high-risk students in alternative schools.
Other impacts	Not reported
Quality score	Sound

Author	Dishion, T. J., Kavanagh, K., Schneiger, A., Nelson, S., & Kaufman, N. K. (2002) Preventing early adolescent substance use: A family-centered strategy for the public middle school. <i>Prevention Science</i> , 3 (3) 191-201.
Study design	Randomised controlled trial comparing school-based family-centred prevention strategy and control group
Participants	Grade 6 middle school students and their families
Intervention focus	Substance use prevention for middle school students
Intervention type	Program involves a multi-level family centred strategy focusing on parenting practices – ‘Adolescent Transitions Program’ (ATP).
Duration of intervention	The intervention occurred over 2 to 3 years.
Follow-up	Data collection while students in Grades 6, 7, 8 and 9
Original N	672
Mean age	Not reported – Grades 6 to 9
Gender	47.8% female, 52.2% male,
Ethnicity	US-based study – 41.4% European American, 32.3% African American, 7.3% Hispanic, 5.5% Asian, 2.2% Native American.
Attrition rate	Unclear (from 13.3% to 31.5% depending on final sample size). Attrition rate for each group were unclear.
Final sample size	Unclear. Noted excluding 216 cases from analysis, resulting in N = 460. No data was available for 89 students by Grade 9, resulting in N = 583.
Key components	Tiered multilevel family intervention involving: a) a Parent Consultant based in a Family Resource Centre, who facilitated six-week classroom courses that involved parent-child homework activities; b) a brief family intervention (the ‘Family Check-up’) that involved three sessions based on motivational interviewing; and c) family intervention for ‘indicated’ problems that involved a 2 to 3 session brief intervention selected from a ‘menu’ in collaboration with family. The model is founded on an ‘ecological’ model involving the integration of family-centred approaches and school dynamics.
Outcomes	Students involved in the intervention showed reduced substance use by first year high school. There was no association between the extent the young person was ‘at-risk’ of using and the benefit from the program. Parental engagement in the intervention was less than expected.
Other impacts	Not reported
Quality score	Sound – attrition rates for each group were unclear.

Author	Donaldson, S. I., Thomas, C. W., Graham, J. W., Au, J. G. & Hansen, W. B. (2000) Verifying drug abuse prevention program effects using reciprocal best friend reports. <i>Journal of Behavioral Medicine</i> , 23 (6) 585-601.
Study design	Randomised controlled trial comparing normative education program with control group
Participants	Students in Grades 5 to 10
Intervention focus	Drug abuse prevention in schools
Intervention type	Normative education in public schools ('Adolescent Alcohol Prevention Trial')
Duration of intervention	Classroom based normative education group involved 9 lessons either: a) in Grade 5, followed by a Grade 7 booster program, or in Grade 7 only
Follow-up	Questionnaires administered in Grades 8, 9 and 10
Original N	11995
Mean age	Not reported
Gender	53% female, 47% male
Ethnicity	US-based study – 45% European American, 37% Hispanic, 13% Asian, 3% African American, 2% other
Attrition rate	Unclear – subset of sample is used in analysis (where participant and best friend agreed on substance use/non-use)
Final sample size	Depends on analysis undertaken – e.g. participants with verified reports of alcohol use/non-use is 2722 in Grade 8, 2090 in Grade 9, and 1084 in Grade 10.
Key components	Normative education approach (underpinned by social influences theory)
Outcomes	Public school students who received normative education (in Grade 5 and/or Grade 7) used significantly less alcohol and tobacco in the Grades 8, 9 or 10 than students receiving comparison interventions. However, normative education did not appear to be effective when implemented in private Catholic school settings.
Other impacts	Not reported
Quality score	Sound – attrition rates for each group were unclear.

Author	Duncan, T. E., Duncan, S. C., Beauchamp, N., Wells, J. & Ary, D. V. (2000) Development and evaluation of an interactive CD-ROM refusal skills program to prevent youth substance use: "Refuse to use.". <i>Journal of Behavioral Medicine</i> , 23 (1) 59-72.
Study design	Randomised controlled trial comparing interactive CD-ROM intervention with control group
Participants	School students Grades 9 to 12
Intervention focus	Refusal skills program in high schools
Intervention type	Classroom based interactive CD-ROM program designed to reduce adolescent substance use ('Refuse to Use' program)
Duration of intervention	One classroom lesson
Follow-up	Post-test the day after intervention
Original N	74
Mean age	15.2 years
Gender	39% female, 61% male
Ethnicity	US-based study. Program developed for a multi-cultural population (i.e. Non-Hispanic Caucasian, African-American, and Hispanic)
Attrition rate	13% – no significant differences between groups
Final sample size	65
Key components	CD-ROM program uses interactive video format vignettes to teach refusal skills and socially acceptable responses in situations in which a young person is offered marijuana. Focus groups were used in program development to identify key situations and themes. Social influences model underpinned the strategy.
Outcomes	Students who participated in the CD-ROM intervention showed: a) increased efficacy to refuse the offer of marijuana; b) increased intention to refuse an offer; c) increased awareness of the social norms re substance use; d) increased importance of respect for another person's decision to refuse (females only); and d) recall of approximately half the refusal strategies.
Other impacts	Not reported
Quality score	Sound

Author	Eisen, M., Zellman, G. L., Massett, H. A. & Murray, D. M. (2002) Evaluating the Lions-Quest "Skills for Adolescence" drug education program: First-year behavior outcomes. <i>Addictive Behaviors</i> , 27 (4) 619-632 FTXT: ScienceDirect (tm) http://www.sciencedirect.com/science?_ob=GatewayURL&_origin=SilverLinker&_urlversion=4&_method=citationSearch&_volkey=0306%2d4603%2327%23619%234&_version=1&md5=d4659b8f3a97b2049283a06a9344b8e8
Study design	Randomised community trial comparing school-based drug education program with control group
Participants	Grade 7 students
Intervention focus	Prevention of substance use
Intervention type	Drug education program in schools - 'Skills for Adolescence' (SFA)
Duration of intervention	40 sessions during Grade 7 school year (35-45 minutes/session)
Follow-up	One year post test (end of intervention school year)
Original N	7426
Mean age	0.5% younger than 11 years, 51.1% 11 years, 45.0% 12 years, 3.1% 13 or 14 years
Gender	51.7% female, 48.3% male
Ethnicity	US-based study – Hispanic American 33.9%, white 25.7%, African American 17.6%, Asian American 7.1%, Combination of groups 6.9%, American Indian 1.4%, other 6.3%
Attrition rate	16% overall – no significant differences between groups in attrition rates
Final sample size	6239
Key components	SFA program uses social influence and social cognitive theories, using a variety of approaches to teach social competency and refusal skills.
Outcomes	For students who had not previously used tobacco at baseline, both recent smoking and lifetime marijuana use was lower for those in the intervention group compared to controls. The intervention had an effect on drinking behaviour for Hispanic students, but not among non-Hispanics. For students who used alcohol at baseline, there were significant delays in the transition of drinking to smoking, drinking to marijuana use and binge drinking to marijuana.
Other impacts	Not reported
Quality score	Sound

Author	Fidler, W. & Lambert, T. W. (2001) A prescription for health: A primary care based intervention to maintain the non-smoking status of young people. <i>Tobacco Control</i> , 10 (1) 23-26.
Study design	Randomised controlled trial comparing primary care intervention with control group
Participants	Young people aged 10 to 15 years
Intervention focus	Preventing smoking uptake in young people aged 10 to 15 years
Intervention type	Primary care intervention involving young person's medical practitioner posting information about smoking
Duration of intervention	Mail out at three monthly intervals for one year
Follow-up	One year after initial contact
Original N	2942
Mean age	Unclear (study design was 500 girls and 500 boys from each year of age from 10 to 15 years)
Gender	Unclear. Calculation from data reported indicates the initial contact included 47% boys and 53% girls.
Ethnicity	UK-based – Oxfordshire
Attrition rate	21.5% in control group, and 25.4% in intervention group
Final sample size	1895
Key components	Posting age appropriate materials about the advantages of being a non-smoker from young person's GP based in a health centre. The mail outs included certificates/poster designed to reinforce non-smoking behaviour.
Outcomes	Smoking uptake was significantly lower in the intervention group (5.1%) compared with the control group (7.8%). The intervention was more effective for boys than girls. For girls, it appeared to be most effective for those in the 10 to 11 year age group. The intervention was effective for young people categorised as 'definite non-smokers', but no significant effect for preventing initiation was found for those categorised as 'potential smokers'.
Other impacts	Not reported
Quality score	Sound

Author	Fishbein, M. & Hall-Jamieson, K. (2002) Avoiding the boomerang: Testing the relative effectiveness of antidrug public service announcements before a national campaign. <i>American Journal of Public Health</i> , 92 (2) 238-245.
Study design	Randomised controlled trial comparing anti-drug public service announcements with non-drug related television program control condition
Participants	Students from Grades 5 to 12
Intervention focus	Prevention of substance use
Intervention type	Media campaign (anti-drug public service announcements)
Duration of intervention	One school session
Follow-up	Evaluation took place immediately following each public service announcement
Original N	3609
Mean age	Range 11-20 years, median 15 years
Gender	50.8% Males, 49.2% females
Ethnicity	US-based study – whites 49.1%, African American 31.5%, Hispanics 6.4%, Native Americans 4.4%, Asian/Pacific Islander 3.1%, other 5.5%
Attrition rate	Not relevant as no follow-up undertaken
Final sample size	Not relevant as no follow-up undertaken
Key components	Advertisements focused on negative consequences of drug use, avoidance behaviour, self-efficacy and refusal skills and self-esteem.
Outcomes	There was wide variation in perceived effectiveness of the public service announcements; 16 were rated more effective than controls, eight did not significantly differ, and six were rated as less effective. Those judged to be most effective targeted heroin and methamphetamine and those judged the least effective targeted marijuana or drugs in general (the former contained dramatic representations of harm, and the latter modelled avoidance behaviour or included a 'just say no' message). Relative effectiveness was highly positively correlated with realism, amount learned, and negative emotion, and was negatively correlated with positive emotion
Other impacts	Not reported
Quality score	Sound (the outcomes examined in this study were perceived effectiveness rather than substance use behaviour, and no follow-up was undertaken)

Author	Komro, K. A., Perry, C. L., Williams, C. L., Stigler, M. H., Farbaksh, K. & Veblen-Mortenson, S. (2001) How did Project Northland reduce alcohol use among adolescents? Analysis of mediating variables. <i>Health Education Research</i> , 16 (1) 59-70 FTXT: HighWire http://her.oupjournals.org/content/vol16/issue1/index.shtml
Study design	Randomised controlled trial comparing community-wide alcohol prevention strategies with control group
Participants	Grade 6 to 8 school students
Intervention focus	Alcohol use reduction (focus on mediating variables impacting on outcomes)
Intervention type	Multi-level intervention involving community-wide activities, parental participation and education, peer leadership activities, and school-based social-behavioural curricula ('Project Northland')
Duration of intervention	3 years
Follow-up	Post intervention
Original N	Not reported - Calculated as 2347
Mean age	Not reported – Grades 6 to 8
Gender	49% females, 51% males
Ethnicity	US-based – 95.6% white, 3.7% American Indian
Attrition rate	19% attrition – no significant differences between attrition rates between groups
Final sample size	1901
Key components	Environmental, individual and behavioural levels of change were targeted. The intervention included community-wide activities, parental participation and education, peer leadership activities, and school-based social-behavioural curricula.
Outcomes	Significantly fewer students involved in intervention reported alcohol use compared with control group. There was evidence of dissipation of differences between intervention and control groups by the end of Grade 9.
Other impacts	This paper focused on mediating outcomes of the intervention. Statistically significant mediators included: peer influence and normative expectations of non-use; attitudes and behaviours concerning substance use (e.g. stimulus seeking); functional meanings supporting non-use of alcohol; alcohol related communication between parents and their children; and self-efficacy re refusal skills (for students who did not use alcohol at baseline).
Quality score	Sound – program effects were reported in an earlier paper and this paper was oriented toward mediation analysis. As a result some items on the appraisal checklist were unclear e.g. no data provided on numbers recruited to each condition and pre- and post- intervention data was reported in the form of regression models.

Author	LoSciuto, L., Hilbert, S. M., Fox, M. M., Porcellini, L. & Lanphear, A. (1999). A two-year evaluation of the Woodrock Youth Development Project. <i>Journal of Early Adolescence</i> , 19 (4) 488-507.
Study design	Randomised controlled trial comparing multi-component school-oriented prevention program with control group
Participants	At risk' elementary and middle school youth aged 6 to 14 years
Intervention focus	Preventing and/or reducing alcohol, tobacco and other drug use
Intervention type	Multi-component 'risk-focused' approach, targeting well-being at the individual level, family relations, the school environment and community supports – 'Woodrock Youth Development Project' (YDP)
Duration of intervention	One academic year
Follow-up	Post intervention (end of academic year)
Original N	822
Mean age	10.18 years
Gender	50% female, 50% male
Ethnicity	US-based study – 45% Latino, 18.9% white, 12.4% African-American, 10.2% Asian, 2.2% American Indian, 11.3% Other/Multiethnic
Attrition rate	12.38% for experimental group and 13.17% for control group (not statistically significant)
Final sample size	718
Key components	Three main strategies in the YDP included: improving family, school and community supports to young people; enhancement of interpersonal and general living skills; and improving drug resistance skills and knowledge. Components included human relations classes, peer mentoring, extracurricular activities, and enhancing school, family and community involvement in program activities.
Outcomes	Significant reductions in self-reported substance abuse over the last month/lifetime were found for students participating in the YDP compared with control group. Effect sizes for the intervention were small.
Other impacts	Students in the intervention group reported improvements in race relations and school attendance.
Quality score	Sound – limited pre- and post-intervention data provided, and no longer-term follow-up undertaken.

Author	Park, J., Kosterman, R., Hawkins, J. D., Haggerty, K. P., Duncan, T. E., Duncan, S. C. & Spoth, R. (2000) Effects of the "Preparing for the Drug Free Years" curriculum on growth in alcohol use and risk for alcohol use in early adolescence. <i>Prevention Science</i> , 1 (3) 125-138.
Study design	Randomised controlled trial comparing parenting program with control group
Participants	Grade 6 students and their parents
Intervention focus	Parenting program to help prevent alcohol use in young people
Intervention type	Multi-media skills training program for parents – 'Preparing for Drug Free Years' (PDFY)
Duration of intervention	Five sessions each of two hours duration
Follow-up	Post-intervention and at 1, 2 and 3.5 years
Original N	424
Mean age	Parents - 36.9 years for mothers, and 39.6 years for fathers. Young people - 11.3 years at pre-test
Gender	Not reported (male and female?)
Ethnicity	US-based – Caucasian-American living in rural mid-west
Attrition rate	15% from post-test, 27% 1 year follow-up, 33% 2 year follow-up and 30% 3.5 year follow-up. Attrition significantly higher for PDFY group at post-test, but no significant difference for follow-up.
Final sample size	295
Key components	The PDFY program was underpinned by the social development model. The program involved skills in communicating norms about adolescent substance use, family management, conflict resolution, and helping children learn to resist antisocial peer influences.
Outcomes	Students participating in the PDFY program had statistically significant reduction in growth of alcohol use compared with control group.
Other impacts	The intervention significantly strengthened parental norms about substance use by young people. No significant effects were found for proactive family management practices, family conflict, or refusal skills in young people.
Quality score	Sound

Author	Peleg, A., Neumann, L., Friger, M., Peleg, R. & Sperber, A. M. (2001) Outcomes of a brief alcohol abuse prevention program for Israeli high school students. <i>Journal of Adolescent Health</i> , 28 (4) 263-9.
Study design	Randomised controlled trial comparing brief school-based intervention to reduce alcohol use with control group
Participants	Grade 10 students
Intervention focus	Reduction of alcohol abuse
Intervention type	Brief school-based intervention
Duration of intervention	Three days
Follow-up	One- and two-year follow-up
Original N	1000
Mean age	Not reported (Grade 10)
Gender	Intervention group - 56% female, 44% male. Control group – 58% female, 42% male
Ethnicity	Israel-based
Attrition rate	24% at two years – attrition rates for each group were unclear
Final sample size	760
Key components	The program was underpinned by social skills theory. The program involved information provision, workshops, expert lectures and interactive activities. Some key components included: staff training by experts; community-based extracurricular activities; intensive intervention; participation of the entire school grade; and use of movies and role plays.
Outcomes	Alcohol consumption remained the same for the intervention group and increased significantly for the control group at one and two year follow-up. In the subgroup of students who were regular alcohol users at pre-test the intervention was not effective.
Other impacts	Not reported
Quality score	Sound – attrition rates for each group were unclear.

Author	Perry, C. L., Komro, K. A., Veblen-Mortenson, S. & Bosma, L. M. (2003) A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. <i>Archives of Pediatrics & Adolescent Medicine</i> , 157 (2) 178-84.
Study design	Randomised controlled trial comparing two school-based drug education programs with control group
Participants	Grade 7 students
Intervention focus	Prevention of substance use and violence in young people
Intervention type	Program for junior and middle high school students teaching skills in resisting influences to use drugs and handling violent situations – ‘Drug Abuse Resistance Education’ (DARE) and DARE Plus programs.
Duration of intervention	10 sessions
Follow-up	One and two year follow-up
Original N	6237
Mean age	Not reported (Grade 7)
Gender	48.4% female, 51.6% male
Ethnicity	US-based – 67.3% white, 7.5% African American, 12.7% Asian American, 3.6% Hispanic, 4.0% American Indian, 4.9% other
Attrition rate	16% overall – no significant difference in attrition rates between groups
Final sample size	5239
Key components	The program is taught by police officers. DARE Plus also included a peer-led program involving parents (‘On the VERGE’), extracurricular activities and neighbourhood action teams which addressed school and neighbourhood issues re substance use and violence.
Outcomes	Male students participating in DARE Plus program were less likely to increase their tobacco, alcohol and other drug use and victimisation in comparison to control groups. Male students in DARE Plus program also showed reduced tobacco use and violence in comparison to the students in the DARE group. The only significant difference for female students was that those in the DARE Plus Program were less likely to report having ever been drunk, compared with those in the DARE group
Other impacts	Male students in the DARE Plus program compared to both other conditions were less likely to increase their normative estimates and expectations about substance use and violence, and less likely to report having increased access to drugs.
Quality score	Sound

Author	Perry, C. L., Williams, C. L., Komro, K. A., Veblen-Mortenson, S., Stigler, M. H., Munson, K. A., Farbakhsh, K., Jones, R. M. & Forster, J. L. (2002) Project Northland: Long-term outcomes of community action to reduce adolescent alcohol use. <i>Health Education Research</i> , 17 (1) 117-32. http://her.oupjournals.org/content/vol17/issue1/index.shtml
Study design	Randomised controlled trial comparing multi-component prevention program in schools with control group
Participants	School students Grades 6-12
Intervention focus	Prevention and reduction of alcohol use in young people
Intervention type	Comprehensive, multi-component intervention involving school and community based action – ‘Project Northland’
Duration of intervention	Multi-component intervention over seven years.
Follow-up	Annual data collection over seven years
Original N	3151
Mean age	Not reported (Grades 6 to 12)
Gender	47% female, 53% male
Ethnicity	US-based – 93% white, 5% American Indian
Attrition rate	32.2% overall – no significant differences in attrition rates between groups
Final sample size	2953 (growth curve analysis was undertaken in order to allow inclusion of data from participants who did not provide data at every sample point)
Key components	Phase 1 consisted of a program for a cohort of students in Grades 6 to 8 involving school curricula, peer leadership, parental participation and community task forces. The Interim Phase occurred in Grades 9 and 10 and involved a five session classroom program. Phase 2 consisted of a program for the cohort in Grades 11 and 12, which involved classroom curricula, parent education, youth development activities, print media campaigns, and community organising.
Outcomes	The program was most effective for the younger students, and when the intervention focused on peer influence and developing social skills. Alcohol use behaviours significantly increased during the Interim Phase. In Phase 2 students participating in the program were significantly less likely to increase alcohol use and binge drinking in comparison to the control, although this effect was moderate.
Other impacts	In Phase 1 students in the intervention program were significantly less likely to increase their perceived access to alcohol or perceptions about peer influence to drink alcohol. In Phase 2 there were no significant differences in these psycho-social measures between groups.
Quality score	Sound

Author	Spoth, R. L., Gyll, M. & Day, S. X. (2002) Universal family-focused interventions in alcohol-use disorder prevention: Cost-effectiveness and cost-benefit analyses of two interventions. <i>Journal of Studies on Alcohol</i> , 63 (2) 219-28.
Study design	Randomised controlled trial comparing two types of family focused interventions with a control group to provide cost-effectiveness and cost-benefit analysis
Participants	Grade 6 students
Intervention focus	Prevention of alcohol use disorder
Intervention type	Family-focused interventions to prevent alcohol use disorder through strengthening healthy interactional patterns between families and peers and teaching resistance skills – ‘Iowa Strengthening Families Program’ (ISFP) and ‘Preparing for Drug Free Years’ (PDFY)
Duration of intervention	ISFP was seven sessions and PDFY was five sessions
Follow-up	Post-intervention and one year follow-up for four years in total
Original N	667
Mean age	Parents – 37.2 years (mothers) and 40.1 years (fathers). Grade 6 students followed up over 4 years (ages 12 to 18)
Gender	The target child was female in 54.8% of families, and male in 45.2%.
Ethnicity	US-based – 98.8% Caucasian
Attrition rate	28.3% overall – no significant differences in attrition rates between groups.
Final sample size	478
Key components	Both interventions consist of parenting skills education. The ISFP involves all targeted children and provides more parent-child interactive activities than the PDFY program.
Outcomes	Conservative estimates for the ISFP intervention were a cost effectiveness figure of \$12, 459* per case prevented, a benefit cost ratio of \$9.60 per \$1 invested, and a net benefit of \$5,923 per family. For PDFY, estimates were a cost effectiveness of \$20,439 per case prevented, a benefit cost ratio of \$5.85 per \$1 invested, and a net benefit of \$2,697 per family” (p. 1). The authors concluded that interventions involving family skills training for the general population have the potential to delay initiation of alcohol use in young people. This may prevent substantial societal costs for a relatively small intervention cost.
Other impacts	Not applicable
Quality score	Sound – note: this study focuses on cost-effectiveness and cost-benefit analysis rather than alcohol use behaviours. The latter data is available in other publications.

*note dollar costs refer to US currency

Author	Storr, C. L., Ialongo, N. S., Kellam, S. G. & Anthony, J. C. (2002) A randomized controlled trial of two primary school intervention strategies to prevent early onset tobacco smoking. <i>Drug & Alcohol Dependence</i> , 66 (1) 51-60.
Study design	Randomised controlled trial comparing two primary school intervention strategies with control group
Participants	Grade 1 primary school students (age 6)
Intervention focus	Prevention of early onset tobacco use
Intervention type	Primary school intervention to address early risk behaviours for smoking involving either classroom centred (CC) intervention or family-school partnership (FSP) intervention
Duration of intervention	CC intervention took place in classroom setting over one year, and FSP intervention involved nine workshops for parents as well as weekly 'home-school learning and communication' activities in Grade 1
Follow-up	Post-testing six years following intervention
Original N	678
Mean age	5.7 years
Gender	47% female, 53% male
Ethnicity	US-based – 86% African-American and 14% Euro-American heritage
Attrition rate	19% overall – no significant differences in attrition rates between groups
Final sample size	549
Key components	CC intervention aimed to enhance teacher's behaviour management skills and FSP intervention aimed to improve parent-teacher communication and parenting skills in behaviour management skills. Both interventions were designed to reduce early risk behaviours for later substance use such as attention problems and aggressive and shy behaviour in children. The intervention is underpinned by life course social field theory and the organisational theory of development.
Outcomes	Children participating in the CC and FSP intervention groups had a statistically significant reduced risk of tobacco use six years later. The risk reduction was modest (26% students had initiated tobacco use for both intervention groups, compared with 33% of the control group).
Other impacts	Not reported
Quality score	Sound

Author	Sussman, S., Sun, P., McCuller, W. J. and Dent, C. D. (2003, in press) Project towards no drug abuse: two-year outcomes of a trial that compares health educator delivery to self-instruction. <i>Preventative Medicine</i> .
Study design	Randomised controlled trial comparing health-educator led and self-instruction versions of classroom program with control group
Participants	High school students aged 14 to 19 years (93% were 16 to 18 years) attending alternative high schools due to 'functional problems'
Intervention focus	Drug abuse prevention for high risk high school students
Intervention type	Classroom-based drug prevention program – 'Project Towards No Drug Abuse' (TND)
Duration of intervention	12 classroom-based sessions
Follow-up	One and two years post-intervention
Original N	1037
Mean age	16.7
Gender	46% female, 54% male
Ethnicity	US-based – 42% Latino, 7% Asian American, 5% African American, 1% Other
Attrition rate	45% overall – no significant differences in attrition rates between groups
Final sample size	575
Key components	This intervention added three sessions onto previous TND curriculum, focusing on prevention of marijuana use, tobacco cessation and self-control for drug abuse and violence prevention. The intervention was underpinned by a motivation-skills-decision-making model.
Outcomes	Students in the health-educator led intervention were significantly less likely to have initiated substance use (tobacco, alcohol, marijuana and other illicit drugs) in comparison to the self-instruction program and control group at two-year follow-up. The long-term effects for marijuana use were only found for males who did not use marijuana at pre-test. Highly interactive delivery of the program by a health educator appeared to be a key component.
Other impacts	Not reported
Quality score	Sound

Author	Taylor, B. J., Graham, J. W., Cumsille, P., & Hansen, W. B. (2000) Modeling prevention program effects on growth in substance use: analysis of five years of data from the Adolescent Alcohol Prevention Trial. <i>Prevention Science</i> , 1 (4) 183-97.
Study design	Randomised controlled trial comparing different components of school-based alcohol and tobacco use prevention programs with control group
Participants	Grade 7 students
Intervention focus	Prevention of alcohol and tobacco use
Intervention type	The four groups in the school-based substance use prevention program ('Adolescent Alcohol Prevention Trial') consisted of: 1) drug use information only; 2) resistance skills training plus information; 3) normative education plus information; and 4) resistance training and normative education plus information.
Duration of intervention	Additional details about program reported in earlier papers – intervention occurred during Grade 7
Follow-up	Over five year period from Grades 7 to 11
Original n	3027
Mean age	Students in Grade 7 at outset and participation ceased after Grade 11
Gender	"Boys and girls were represented in nearly equal numbers" (p. 186).
Ethnicity	US-based study – 47% white, 28% Hispanic, 16% Asian, 2.5% black
Attrition rate	30% of data points missing across all five measurements – attrition rates for each group were unclear.
Final sample size	Unclear as statistical technique allowed inclusion of data even if some data points were missing
Key components	The paper focused on the analytical methods involving the 'growth curve modelling' approach to examine program effects on the pattern of change over time. In relation to intervention, the 'information only group' received lessons about social and health consequences of using alcohol other drugs; the 'resistance training plus information group' received the information lessons plus instruction teaching them how to resist pressure to use alcohol and other drugs; the 'normative education plus information group' received the information lessons plus lessons that corrected misperceptions concerning the prevalence and acceptability of alcohol and other drug use; and the 'combined resistance training and normative education plus information group' received lessons from all three other components
Outcomes	Students participating in the normative education program had reduced levels of alcohol and tobacco use and reduced growth in use over time, and a lower rate of change in use compared with the other groups.
Other impacts	Not reported
Quality score	Sound – some limited description of study design as focus on statistical technique and these details reported in earlier papers

Author	Werch, C. E., Carlson, J. M., Pappas, D. M., Edgemon, P., & DiClemente, C.C. (2000). Effects of a brief alcohol preventive intervention for youth attending school sports physical examinations. <i>Substance Use and Misuse</i> , 35 (3) 421-432.
Study design	Randomised controlled trial comparing brief alcohol use prevention intervention with control group
Participants	Grade 7 to 9 junior high school students attending sports physical examinations
Intervention focus	Brief alcohol misuse prevention intervention (primary health care approach)
Intervention type	Modified version of the STARS for Families intervention ('Start Taking Alcohol Risks Seriously') consisting of telephone consultation with students before and after they attended sports physical examinations, and mailing prevention postcards to parents/guardians.
Duration of intervention	Two brief telephone consultations – first consultation approximately 20 minutes. Ten prevention cards mailed twice weekly to parents/guardians.
Follow-up	Six months post-test
Original N	178
Mean age	13.1 years
Gender	48.3% female, 51.7% male
Ethnicity	US-based – 74.7% Caucasian, 13.5% African-American
Attrition rate	8.4% overall – no differential attrition between groups
Final sample size	163
Key components	The intervention was underpinned by three behavioural theories (McMOS prevention model) and included communication re risk/protective factors and prevention messages. Telephone consultations with students were undertaken by nurses who discussed why and how the young person should avoid alcohol use. The prevention postcards asked parents/guardians to talk about the key fact on each card with their child. Cost per student estimated at \$16.13 per student (US currency).
Outcomes	Students participating in the intervention reported significantly lower alcohol use on three of four measures at six-month follow-up in comparison to the control group. When findings for suburban and rural youth were analysed separately, fewer suburban youth in the intervention group intended to drink alcohol over the next six months compared to the control group. Further, fewer rural youth in the intervention group reported using alcohol over the last 30 days compared to the control group.
Other impacts	Not reported
Quality score	Sound

Author	Werch, C. E., Owen, D. M., Carlson, C. C., DiClemente, C. C., Edgemon, P. & Moore, M. (2003) One-year follow-up results of the STARS for Families alcohol prevention program. <i>Health Education Research</i> , 18 (1) 74-87. http://her.oupjournals.org/content/vol18/issue1/index.shtml
Study design	Randomised controlled trial comparing brief alcohol use prevention intervention with a minimal intervention control group
Participants	Grade 6 students from a 'magnet' (bused) school and inner-city neighbourhood school
Intervention focus	Brief alcohol misuse prevention intervention (primary health care approach)
Intervention type	Brief alcohol prevention intervention STARS for Families ('Start Taking Alcohol Risks Seriously') involving nurse consultations with young people and parent materials
Duration of intervention	The four main intervention components were implemented over two years (approximately one component per school semester). Nurse consultations took approximately 20 minutes per student
Follow-up	Annual post-test over 2 years and 1 year follow-up
Original N	650
Mean age	11.4 years
Gender	46% female, 54% male
Ethnicity	US-based – 58% African American, 34% Caucasian and 8% other
Attrition rate	12% overall – no differential attrition between groups
Final sample size	507
Key components	The intervention was underpinned by the McMOS prevention model (including stage of habit acquisition theories and associated risk/protective factors). The intervention consisted of four main components: 1) one-on-one nurse consultation addressing why and how the student could avoid alcohol use; 2) up to 10 prevention postcards mailed to parents with key facts about how to communicate with their children about avoiding alcohol use; 3) follow-up nurse consultation (booster session); and 4) four family take-home lessons aiming to enhance parent-child communication re avoiding alcohol use. The parent/guardian materials were endorsed by a physician.
Outcomes	For students in the 'magnet' schools those participating in the intervention were significantly less likely to plan to drink alcohol in the next six months, had greater motivation to avoid drinking and had fewer risk factors associated with drinking in comparison to control group students. For students attending the neighbourhood schools, those participating in the intervention had significantly fewer risk factors for alcohol use than those in the control group.
Other impacts	Process measures of student, parent and nurse satisfaction with the interventions found that the interventions were rated favourably.
Quality score	Sound

