

National Native Alcohol and Drug Abuse Program

**A REVIEW OF THE NNADAP
PREVENTION PROGRAM
SUMMARY OF KEY FINDINGS.**

**ADAPTED FROM FULL REPORT; SCAN AND ANALYSIS OF ON
RESERVE SUBSTANCE ABUSE ADDICTIONS PREVENTION
PROGRAMMING**

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1. Executive Summary

The problematic use of substances, including alcohol, tobacco, prescription and illicit drugs, has consistently been identified as a priority health concern by Canada’s First Nations communities and representative organizations. The primary federal program to both treat and prevent these problems among First Nations is the National Native Alcohol and Drug Abuse Program (NNADAP), a national network of indigenous-specific addiction programs that has been in place for almost 30 years. Despite there being many strengths within NNADAP, including the provision of culturally relevant services, previous reviews of this program have noted significant challenges to its effective implementation.

This report summarizes the key findings of a more detailed study carried out for the First Nations and Inuit Health Branch (FNIHB) of Health Canada; Scan and Analysis of on Reserve Substance Abuse Addictions Prevention Programming (Gifford, 2009). The report outlines the purpose of the research and methods utilized, presents the summary results of a literature review on evidence including a discussion on use of evidence in First Nations and indigenous substance abuse programs, and explores key informant interview findings particularly in relation to systems, program and community related challenges. It concludes with recommendations for renewal of the NNADAP prevention program based on integrated analysis of this study data.

It was outside the scope of the research to carry out systematic reviews of current prevention efforts on reserve; linking evidence with current efforts is still required to strengthen the indigenous evidence base. What this research does contribute is a proposed set of principles for evidence-based practice, a new framework for implementing prevention activities, a summary of key challenges to current implementation of the

prevention program and recommendations for renewal informed by best available evidence and primary data from key informants.

A qualitative evaluation research approach was used to identify challenges and gaps within the NNADAP and recommendations were made to guide its renewal over the next 10 years. This summary report focuses specifically on the prevention component of NNADAP. It seeks to update the evidence for effectiveness in substance abuse prevention and present the results from an environmental scan of prevention programs, including primary, secondary and tertiary activities, across Canada. A literature search, with a specific indigenous focus, was followed up with a review of both formal and grey literature from the last 10 years. The purpose of this was to identify current evidence-based research relating to prevention programs and best practices in addictions prevention. Primary research was also carried out through key informant interviews to determine the strengths and weaknesses of the current prevention program. While some of the original references have been included in this report, for ease of access summary points are not referenced; the reader is encouraged to review both the footnotes and the full report for complete reference to the literature reviewed and data gathered from primary research.

Participant feedback on the program highlighted significant challenges at all levels; federal, provincial and community. A number of changes are required to renew this national program to bring it in line with current best evidence and to respond to concerns from communities, managers, policy makers, and funders.

A key recommendation from the findings is a move from a primary, secondary and tertiary framework of prevention to a universal, selective and indicated model; placing preventive intervention within a broader public health framework and clearly differentiating prevention from treatment. Such a shift would potentially encourage a focus on a whole of community, multi-level, collaborative approach to wellness. Consolidation of a well delineated prevention framework is required before attempting to integrate prevention with treatment in a broader continuum of care model. The revised definition for prevention should include measures that prevent or delay the onset of

alcohol and other drug use as well as measures that protect against risk and reduce harm associated with alcohol and other drug supply and use.

Challenges to using evidence to inform practice, both generally and specifically for indigenous populations, are discussed briefly in this report and more fully in the detailed report. While the evidence is mixed about the effectiveness of particular approaches and strategies for preventing and reducing substance abuse related harm, a number of themes and principles can be identified from the literature to inform prevention programming overall. A set of principles has been developed based on this current evidence; these principles have been utilized to inform recommendations for program renewal.

Three key strategic areas for action are identified: *improved planning and funding, evidence-based intervention, and monitoring and evaluation*. Full recommendations are contained in section six of this report.

Improved planning and funding: Key components necessary for effective program planning and development such as relevant data, use of evidence and outcome evaluation findings are currently weak. The collection and analysis of both national and local data will need to be strengthened to ensure effective planning and needs analysis. Clearly articulated strategies, coherent program theory and frameworks will help guide implementation and evaluation of the program. Program success is largely reported as outputs; systematic evaluation of program outcomes is needed to determine effectiveness and guide future investments and program developments. Currently there is a lack of resources to implement sustainable culturally based programs; funding levels will need to be increased to effectively implement evidence-based programs. Emphasis appears to be largely on treatment and addictions as a specialty area; approaches associated with treatment and prevention are often single theory approaches, for example, a sobriety or abstinence approach. It will be critical to broaden the approaches to ensure not only a range of interventions targeted at a range of levels is used in line with best evidence but also concurrent disorders such as mental health are addressed as part of an integrated approach. Participation and communication by a range of stakeholders in program renewal will be critical to ongoing success. Implementing the recommendations from this report at a Band or local level will be a critical part of the success of the review. Further

discussion by tribal health providers and leaders, building on what is currently working locally and adequate levels of funding to implement results locally will be required.

Evidence-based interventions will ensure programs that currently exist, and those planned for the future, will be informed by community feedback and indigenous theory and knowledge as well as best Western scientific evidence; this in turn will increase the likelihood of outcome effectiveness. The complexity of substance use, the identification of substance abuse as an issue of great concern for First Nations communities, the impact of related harms, and advances in prevention knowledge means that responses must be based on the best available evidence. Additionally, a significant range of interventions in the field have been shown to yield positive results across different settings and are recommended for wider implementation. Selected and adapted use of some of these in First Nations communities along with the development of new indigenous knowledge and models of practice will be critical to building an indigenous research knowledge base. Critical to advancing an evidence base will be strengthening the NNADAP research program to ensure that evidence is kept current, research is disseminated widely, the indigenous research work force is developed and programs are reviewed regularly. The involvement of communities, recognizing a range of indigenous rights and processes in the renewal program, and working with multiple approaches will ensure that evidence is inclusive of a range of views and embedded at all levels of the program in addition it will ensure consistency with Canadian Institutes of Health Research (CIHR) guidelines for health research with Aboriginal people. NNADAP workers service some extremely high need diverse populations that are impacted by low levels of education, poor housing, unemployment and mental health issues; a significant challenge is the mind shift to community development and prevention that calls for a balance between crisis responses and prevention interventions. Training opportunities for staff implementing the program will need to be broadened to include a public health or population level approach and include training in use of evidence and evaluation.

Monitoring and evaluation will provide a data feedback loop to funders and communities that enables an iterative process of review and revision as required. Currently there is limited systematic, ongoing evaluation to inform regular program review. Critical to evaluation will be the development of logic or program models and planning tools at a

community intervention level that include measurable strategies and outcomes. Evaluation should include formative, process and outcome evaluation. This will require additional resourcing and development support. Support can be achieved through collaborative research partnerships with the NNADAP research program, and community capacity building through formative evaluation support and work force training.

2. Background

The National Native Alcohol and Drug Abuse Program (NNADAP) is an example of a First Nations and Inuit Health Branch (FNIHB) program largely controlled by First Nations and Inuit communities and organizations. The goal of NNADAP is to support First Nations and Inuit people and their communities in establishing and operating programs aimed at arresting and offsetting high levels of alcohol, drug, and solvent misuse among their target population living on-reserve. Most of the NNADAP activities fall into the following areas: prevention, treatment, research, and development. Now in its 27th year, the NNADAP includes more than 500 alcohol and other drug abuse community-based programs and funding for approximately 730 NNADAP community workers. Prevention component activities cover three key areas: prevention, aimed at preventing serious alcohol and other drug abuse problems; intervention, aimed at dealing with existing abuse problems at the earliest possible stage; and aftercare, aimed at preventing alcohol and drug abuse problems from reoccurring.

3. Purpose of the Research Project

The overall purpose of the research was to identify challenges or gaps within the existing programming and recommend areas for renewal that will guide FNIHB's efforts to strengthen the prevention component of NNADAP over the next 10 years.

More specifically, the research project focused on the following:

- identifying existing evidence-based best practices and strategies for the prevention of substance abuse in Aboriginal and non-Aboriginal settings;
- identifying gaps and challenges of the NNADAP prevention component; and

- proposing various short-term and longer term strategies/actions to strengthen the NNADAP prevention component over the next 10 years.

4. Research Methods

A standard qualitative evaluation research design incorporating a literature search and review, key informant interviews and thematic analysis was used to carry out the research. Note that an indigenous approach was used to carry out all stages of the research, which included an emphasis on indigenous material. As well, whenever possible, interviews were carried out face to face to allow for indigenous protocols, and analysis was informed by indigenous concepts of health and well-being as well as the social and cultural determinants of indigenous health. All participants had an opportunity to review material before the final report was submitted.

4.1 Literature search and review

A literature search and review, limited to 1996 and onwards, included both formal and grey literature in the following areas:

- NNADAP specific information (provided by FNIHB);
- principles of effective substance abuse prevention programming;
- evidence-based research relating to prevention programs;
- documented best practices in addictions prevention;
- evidence-based indigenous, municipal, provincial, federal, international prevention strategies, including evaluations of such strategies; and
- new prevention approaches that show promise.

Criteria for selection included peer reviewed journal articles, meta-analysis of existing evidence, Canadian specific evidence, and indigenous methodologies. In total 57 reports and articles were accessed and reviewed between August and October 2008. A full description of the criteria used for literature searching is provided in the detailed report (Gifford, 2009).

4.2 Key informant interviews

Thirty-one interviews with NNADAP related workers were conducted face to face across five provinces: British Columbia, Alberta, Ontario, Quebec, and Nova Scotia. Of the 31 participants, there was a gender mix of 19 females and 12 males. The majority of the participants were indigenous. What was striking in the sample was the length of service many of the informants had in the NNADAP, with nine informants serving over 20 years, 10 serving over 10 years and no informants with less than 12-months experience in the program.

All the participants had some type of formal training in addictions work, ranging from short-term courses to advanced degrees such as master's level qualifications. Informants came from a range of situations, with those in management positions often having had previous experience as front-line workers. Seven of the informants worked at a national level either with Health Canada or as advisors to the NNADAP as consultants, 10 informants worked regionally across a number of communities, and 14 worked directly with specific reserve communities. These communities ranged in size from populations of less than 1,000 to populations over 8,000.

4.3 Analysis

The literature was analysed to determine potential indigenous models of substance abuse prevention and evidence of effectiveness in indigenous substance abuse programming. The interview data was then reviewed for themes relevant to the research questions. The interview guide was used as a descriptive analytical framework for analysis, i.e., the guide was used to group topics. In this research project, themes were prioritised if they were believable or held meaning to participants, were repeated many times throughout the data, were unique in some way or added to the debate on how to strengthen the prevention component of the NNADAP.

A more detailed account of the research methods, including analysis and limitations, is provided in the full report (Gifford, 2009).

5. Results

5.1 Substance abuse in First Nations communities

Substance abuse, including alcohol and other drug abuse, is a common problem and a major issue of concern to the indigenous population of Canada.

Key points from the detailed report data¹ indicate:

- about a quarter of First Nations people report personal problems with alcohol;
- about three quarters of First Nations people thought alcohol abuse was a problem in their communities;
- a smaller percentage of First Nations people identify themselves as drinkers compared with their non-Aboriginal counterparts;
- higher rates of heavy episodic (“binge”) drinking on a weekly and monthly basis;
- significantly higher alcohol-related harms (e.g., liver cirrhosis, motor vehicle accidents and suicides/self-inflicted injuries);
- the rate of smoking in First Nations is double that of the general population;
- there appears to be a greater proportion of indigenous youth, than non-indigenous youth, using most substances; and
- there are also concerning rates of inappropriate prescription medication use in First Nations communities.

At an individual or micro level, poverty, poor school performance, unstable family structure, unemployment, physical abuse, poor social support networks, temperament, and peer influences have all been associated with higher substance misuse. At a macro level, racism, colonization, the effects of residential schools, intergenerational trauma, social disconnection, socio-economic deprivation, drug availability, inadequate federal government policies and responses, barriers to health care such as language and the lack of culturally sensitive services have all been posited as reasons for high levels of substance abuse. It is outside of the scope of this report to expand on these reasons for

¹ Data utilized in the detailed report (Gifford, 2009) includes the 2002-03 Regional Longitudinal Health Survey administered by the Assembly of First Nations; *Aboriginal Peoples Survey*, Statistics Canada and a range of authors cited in the academic literature including: MacMillan, MacMillan, Offord, & Dingle, 1996; Health Canada, Drug Strategy and Controlled Substances Programme, 2005; Thatcher, 2004; Blackstock, Clarke, Cullen, D'Hondt, & Formosa, 2004; Adelson N, 2005.

high levels of substance abuse. A number of sources do, however, outline contributing socio-cultural and political factors.²

5.1 Definitions of prevention

Based on NNADAP Treasury Board submissions, First Nations communities were intended to have access to primary, secondary and tertiary prevention initiatives for alcohol and other drug abuse. Primary prevention initiatives were to be a series of awareness activities undertaken to prevent the onset of serious alcohol and other drug abuse problems. Secondary prevention initiatives were to be a series of activities aimed at dealing with problematic alcohol and drug use at the earliest possible stage. The tertiary prevention initiatives were intended to assist people in preventing a problem with alcohol or other drug abuse from reoccurring following treatment.

While the terms primary, secondary and tertiary prevention are still used widely in prevention activities, it is timely to reconsider these definitions. In particular, it is proposed to place preventive intervention within a broader wellness intervention framework by differentiating it from treatment (i.e., case identification, standard treatment for known disorders) and maintenance (i.e., compliance with long-term treatment to reduce relapse; aftercare, including rehabilitation). As a requirement of this, the terms primary, secondary, and tertiary prevention would necessarily be replaced by universal, selective, and indicated prevention, the terms defined by the Institute of Medicine (IOM) (European Monitoring Centre for Drugs and Drug Addiction, 2008).

Universal preventive interventions target the general public or a whole population group that has not been identified on the basis of individual risk. Examples of interventions at this level are controlling supply, shaping drinking practices, tobacco taxation, alcohol server training, safer drinking and driving programs, and environmental tobacco smoke legislation. Because universal programs are positive, proactive, and are provided independent of risk status, their potential for stigmatizing participants is minimized and

² Thatcher, 2004; Adelson N, 2005; Blackstock, Clarke, Cullen, D'Hondt, & Formosa, 2004; Loxley, et al., 2004; Nechi Training, Research & Health Promotions Institute, 1998; The National Native Addictions Partnership Foundation (with assistance of Dr. Richard Thatcher), 2008. [see note in References]

they may be more readily accepted and adopted. There is also a large and growing base of empirical evidence that demonstrates the effectiveness of this type of intervention.

Selective prevention serves specific sub-populations whose level of risk is significantly higher than average, either imminently or over a lifetime. This responds to the growing importance of identifiable risk factors, for understanding the initiation and progression of substance abuse, particularly among young people. A primary advantage of focusing on vulnerable populations is that funding can be channelled to those most at risk, populations can be clearly identified through needs analysis and data, and opportunities exist for reducing disparities in health outcomes. Examples of selective intervention programs include: home and community support programs targeting at risk families or communities, youth specific interventions, targeted health education, and social marketing programs.

Indicated prevention aims to identify individuals who are exhibiting indicators that are highly correlated with an individual's risk of developing substance abuse later in life (such as psychiatric disorders, school failure, dissocial behaviour, etc.) or additionally are showing early signs of problematic substance use (but not meeting clinical criteria for dependence) and to target them with special interventions. Identifiers for increased individual risk in youth can be falling grades; conduct disorders; and alienation from parents, school, and positive peer groups. The aim of indicated prevention efforts is not necessarily to prevent the initiation of use, nor the use of substances, but to prevent the (fast) development of a dependence, to diminish the frequency, and to prevent "dangerous" substance use (e.g., moderate instead of binge drinking). Moving to the IOM framework, and, in particular, an indicated approach, will offer communities an opportunity to broaden the current theoretical approach to include a harm reduction approach. Drug education, harm reduction activities, brief interventions by health professionals, social skills training, and parent-child interaction training for children with early behavioural problems are examples of indicated prevention.

In summary, moving the framework to universal, selective, and indicated prevention will provide for greater reach of the program, will allow for targeted interventions, will encourage a range of approaches and is supported by the scientific evidence.

While the IOM framework is useful for classifying the target population, it does not extend to what the intent of the prevention program should be. The author proposes one possible definition for prevention work for the NNADAP — prevention refers to measures that prevent or delay the onset of alcohol and drug misuse (including tobacco), and to measures that protect against risk and reduce harm associated with drug, tobacco and alcohol supply and use. This combined with evidence frameworks and a clear rationale of the approach to be used in implementation of strategies will move the prevention component closer to a well-defined, evidence-based model of practice.

5.2 What works in addictions prevention

5.2.1 Using evidence with Aboriginal populations: issues and challenges

A detailed discussion on the issues and challenges of using “Western scientific” evidence with indigenous populations is discussed in the detailed report and a number of key authors are cited³ (Gifford, 2009, pg 20). The topic is summarized below with particular attention to the integration of evidence from Western evaluation research with indigenous knowledge and approaches.

Using evidence to inform indigenous substance abuse prevention programs is an area under development and not without contention. In particular, research, practice and policy have usually been constructed to affect an entire population without specific attention to differential effects on indigenous populations. However, in the face of limited resources, there is a growing imperative to utilize a range of best available evidence in the funding and development of health services.

Currently, on-reserve NNADAP prevention programs use a range of what could be loosely described as empirical evidence, including traditional knowledge and practice knowledge gained from working with communities over time. The majority of the participants in the study stated that they had not used evidence from evaluation research to inform program development. Some approaches used to treat substance abuse are

³ Loxley, et al., 2004; Centre for Addictions Research of BC for the British Columbia Ministry of Health, 2006; Blackstock, Clarke, Cullen, D'Hondt, & Formosa, 2004; Hallfors, Hyunsan, Sanchez, Khatapoush, Kim, & Bauer, 2006; Weiss, Murphy-Graham, Pertosino, & Ghandi, 2008; McGrath, Sumnall, McVeigh, & Bellis, 2006; Embry, 2000.

adapted from mainstream approaches, for instance, the Alcoholics Anonymous 12-step approach is largely accepted in many reserve communities, but not all approaches adopted are supported by wider evidence.

It is concluded that best available evidence should play a greater role in the development of interventions on reserve. Substance abuse is a complex, social problem and of great concern for First Nations communities, and there are significant impacts from related harms. Advances in prevention knowledge mean responses must be based on a range of evidence. This evidence can include traditional knowledge, systematic evaluation of existing interventions, and scientific evidence such as that gained from evaluation research. Questions remain about the validity and rigour of some of the research conducted to demonstrate effectiveness, and caution should be exercised by policy makers and funders in rigidly applying the “scientific” evidence. However, mainstream scientific evidence should be considered, as a significant number of initiatives have been shown to yield positive results across different settings, including indigenous settings, and are recommended for wider implementation.

The balance between indigenous knowledge and approaches and the adoption and adaptation of mainstream evidence-based models is already justified by existing practices. Currently, indigenous providers, if accessing evidence at all, need to lean on mainstream evidence to support program development, as indigenous specific evidence is in a developmental stage. Building an indigenous research knowledge base about what works in First Nations substance abuse prevention through wider application of the existing evidence in First Nations communities, the further development of indigenous knowledge and models of practice, plus the dissemination of these results by indigenous researchers will mean that distinctly indigenous models will become an established part of the evidence base.

For future program development, it is suggested that:

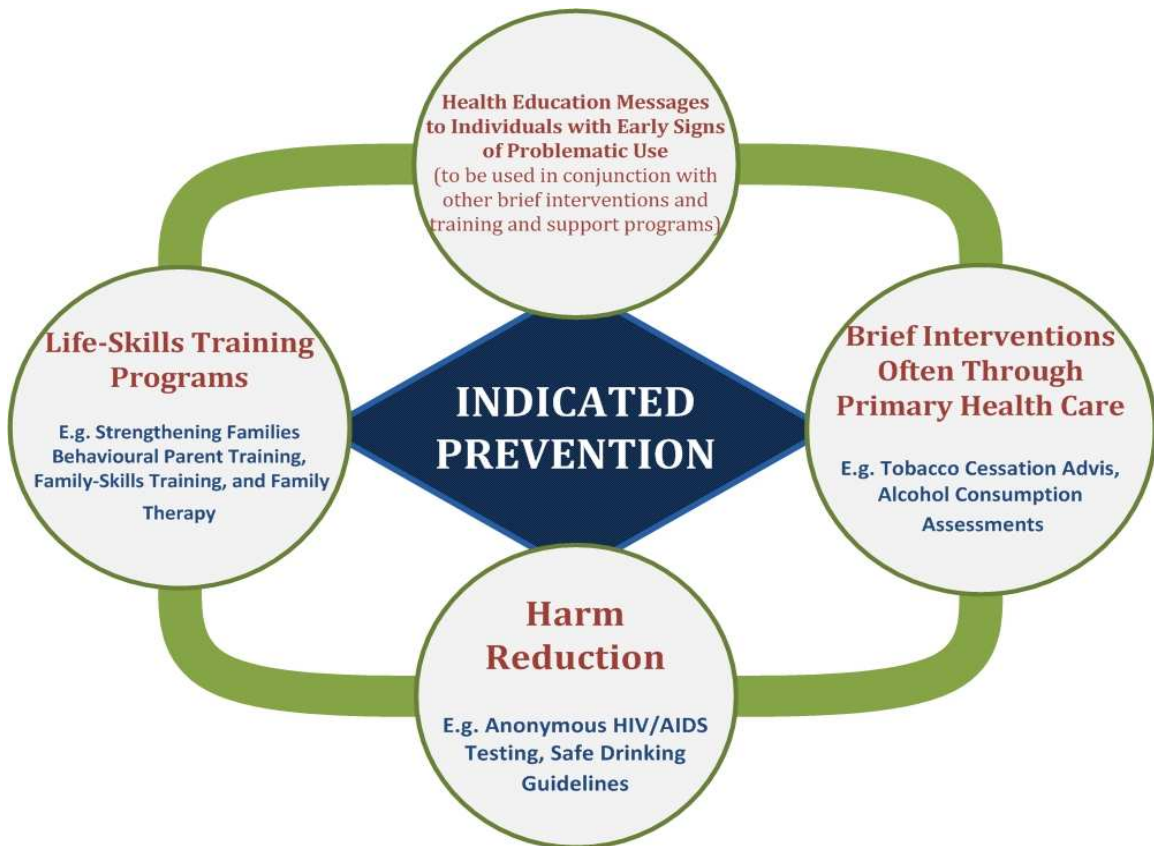
- Principles such as human rights, social and cultural determinants, indigenous rights as well as frameworks that reduce inequalities be considered when judging evidence to inform indigenous program development;

- All methods available be used to determine best evidence including effect size and scientific strength, and reach of the program; and positive prevention results that generalize across time, people, behaviors, and places to achieve maximum prevention effectiveness.
- Potential side effects are reviewed, including a review against cost effectiveness.
- The gap between science and practice in prevention is bridged by enhancing capacity at all levels.
- Best evidence is used to inform indigenous prevention efforts.

5.2.2 Framing the evidence around a universal, selective and indicated approach

This section highlights, in diagrammatic form, where various approaches fit in the universal, selective and indicated prevention framework. It should be noted that the universal, selective and indicated approach defines the level at which interventions are **targeted**; however, in practice, the interventions can cut across levels. For example, social marketing initiatives can be both universal and targeted selective; safer drinking and driving interventions can be universal (through legislation), selective (through social marketing campaigns aimed at youth) and indicated (through individualized support programs aimed at reducing problem drinking).





5.2.3 Key Evidence

This section highlights key evidence that supports specific interventions.

Youth-specific programs

Studies of youth substance abuse programs indicate that offering strong content for behavioural life-skills development; emphasizing team-building and interpersonal delivery methods, including self reflection approaches; and providing intense contact with youth can produce consistent and lasting reductions in substance use (Springer, Sale, Hermann, Sambrano, Kasim, & Nistler, 2004).

In addition, unsupervised after-school recreational facilities, a range of community activities and student organizations were all associated with reduced cigarette smoking and alcohol abuse (VanderWaal, Powell, Terry-McElrath, Bao, & Flay, 2005).

While most key informants interviewed targeted prevention approaches toward youth, no research evidence was located specific to Aboriginal populations on this topic and few programs had carried out systematic evaluations. Future research into matching existing programs with best evidence may be helpful in strengthening the indigenous evidence base.

School-based interventions

Schools are a key site of substance abuse prevention in First Nations communities in Canada. Again, there was no specific evidence located that endorsed current First Nations efforts in this area.

In a special collaborative monograph on substance abuse prevention among American Indian and Alaskan Native Communities, Trimble & Beauvais (2001) report that there is very little evidence that school-based programs in American Indian communities are effective. This is not surprising when the multiple and interrelated causes of substance abuse are considered. The authors go on to suggest that American Indian families, as compared with non-Indian families, have been shown to have a stronger influence in the lives of their children and that any substance abuse prevention initiative must include community, families and schools.

From the general literature, McGrath, Sumnall, McVeigh, & Bellis (2006) found that interactive approaches (e.g., role-plays, active modelling and discussion) have been found to be more effective than non-interactive approaches in reducing drug use in universal school-based drug prevention programs. In addition, peer educators may contribute to the effectiveness of drug prevention programs. There appears to be some short-term evidence for the effectiveness of normative education programs and effective programs tended to have booster components. While the evidence is not strong, school programs for young people appeared most effective when they were delivered to pupils between the ages of 11 and 14. There was some evidence to suggest that school prevention programs that target at-risk students were more effective than those that target general student populations. Incorporating bicultural, competence approaches to skills training has been shown to be effective in reducing the prevalence of drug use among Native American youth.

Community-based interventions

Community driven interventions show a mixed record of success. Examples provided by Wandersman & Florin (2003) demonstrate that population level impacts can be produced by research-driven and community-driven interventions. However, they state that “reviews and cross-site evaluations showed a modest and mixed record; with many interventions not demonstrating results.” Community-level interventions that *did not* show positive outcomes tended to be those that focused on community public education or organizing or training community leaders for prevention; those that *did show* positive outcomes tended to be multi-component interventions (e.g., school, policy, parent, and media programs). The authors in their analysis of the evidence do not recommend abandoning community-level interventions. Rather, they call for “further improvements, including greater articulation of theory, increased sensitivity of measures, improved (or different) methods or designs, and expanded use of ‘best practices’” (Wandersman & Florin, 2003).

Community-level interventions, with the addition of the above recommendations for improvement, are warranted as part of the NNADAP as this is one of the important intervention points. Local control over program development is a strongly held belief in First Nations communities and is supported by wider evidence from community

development literature and the Public Health Framework of Assembly of First Nations. And in collaboration with universal prevention, community intervention is likely to have the widest reach, moving the program closer to a whole of population, wellness model.

Brief interventions

Brady, Sibthorpe, Bailie, Ball, & Sumnerdodd (2002) report on the feasibility and perceived acceptability of brief motivational interviewing for hazardous alcohol use in an urban, Aboriginal health service. This type of intervention fits into the NNADAP prevention framework and could be utilized as part of a comprehensive on-reserve approach to substance abuse prevention. General practitioners (family doctors) were trained in brief motivational interviewing, and health workers were trained in other aspects of the intervention. As a result of the research, there was an increase in general awareness and acceptability of addressing alcohol issues at the health service level. However, the study raised a number of issues that both support and threaten the wide implementation of brief intervention in urban, Aboriginal primary-care settings (Brady et al, 2002).

As many First Nations communities have health services, effective brief intervention, such as that used in tobacco smoking, should be a key part of the NNADAP prevention component.

Relapse prevention

Relapse prevention is a component of the NNADAP framework and largely utilizes a 12-step facilitation approach. The literature on the effectiveness of relapse prevention is not as large as studies reviewing primary prevention. However, one recently conducted study that compared two conceptually distinct aftercare programs — relapse prevention (RP) and 12-Step facilitation model (TSF) — concluded that carefully orchestrated RP and TSF aftercare programs yield process changes that are related positively to improved outcomes (Brown, Seraganian, Tremblay, & Annis, 2002).

While there is some evidence for the effectiveness of relapse prevention models, the author recommends that relapse prevention remains part of the continuum of treatment

and care as it does not fit easily into the universal, selective and indicated prevention model.

Adult drug education

The Correctional Service of Canada (CSC) carried out a review of the literature on the effectiveness of drug and alcohol education. The CSC concluded that drug and alcohol education appears to be effective in shifting attitudes and knowledge related to use; however, the evidence regarding actual behavior change suggests that education as a single program is generally not effective in reducing levels of use. This conclusion highlighted the need to differentiate substance abuse problem levels of clients referred to education programs. The CSC proposes that education may benefit serious substance abusers if incorporated into more multi-faceted programs (Correctional Service of Canada, 1996).

Integrated approaches

While not solely focused on prevention, an integrated approach across prevention and treatment that is located in communities or has community mobile responses may hold some promise. Jiwa, Kelly, and St Pierre-Hansen (2008) conclude that programs should cover prevention, harm reduction, treatment, and aftercare. They identify success factors as solutions that develop from communities' strong community interest and engagement, leadership, and sustainable funding.

An integrated approach is currently provided by some NNADAP prevention programs; in particular, programming provided by the Native Alcohol and Drug Abuse Counselling Association of Nova Scotia, the Akwesasne Mental Health Program, and the Kahnawake NNADAP. These programs all integrate aspects of prevention with the wider determinants of health by using collaborative cross-sector partnerships, and they integrate a number of approaches to prevention. Some programs also work directly with treatment centres to improve the continuum of care.

While some communities are already engaging in an integrated approach, there are many communities that are unable to effectively work on prevention, because immediate

treatment needs are overwhelming. The author suggests that the consolidation of a clearly distinctive prevention approach, both nationally and at a community level, is required before attempting to integrate prevention with treatment in a broader continuum of care model. This will ensure that prevention has a well-defined strategy and approach, is resourced appropriately and has equal validity in the overall NNADAP.

Harm reduction

There are a number of examples of harm reduction approaches being used by First Nations and Inuit communities in Canada. These include supply management, regulated consumption, managed alcohol consumption, safer spaces, injection drug use services (needle exchange programs, supervised injection facilities, methadone maintenance, anonymous HIV/AIDS testing), services for women, education and prevention programs, and product alteration (Dell & Lyons, 2007).

The barriers identified to implementing harm reduction on reserve include majority support for abstinence and prohibition, stigma, accessing care, availability of services, jurisdiction and funding, child welfare (meaning fear of apprehension of children as a result of drug use by parents), community size and limited service infrastructure, and cultural appropriateness (Wardman & Quantz, 2006; Dell & Lyons, 2007).

General agreement on a harm reduction approach may not be that difficult to achieve. Recent results from a telephone survey of 1,500 First Nations residents living on reserve indicate that an overwhelming majority of those who had heard of harm reduction strategies related to drug or alcohol use supported these strategies for their communities (Health Canada, 2008). This research seems to indicate that harm minimization would be acceptable at a community level. However, there would need to be a concerted effort through consultation and education to get key indigenous stakeholders and leaders of NNADAP prevention programs to agree to extend the range of approaches available for dealing with substance abuse on reserve.

Healthy public policy

Alcohol policy and regulations as they apply to indigenous populations are well documented and a good example of healthy public policy initiatives. There is a large and growing base of empirical evidence demonstrating that alcohol supply control is an effective deterrent to alcohol abuse in North America; however, in its extreme form — complete prohibition — it is an ineffective policy for reducing alcohol problems in Aboriginal communities (Gallaher, Fleming, Berger, & Sewell, 1992; Levy & Kunitz, 1974; May, 1992; Dell & Lyons, 2007; Weibel-Orlando, 1990). The exception to this evidence is prohibition in remote communities, which is shown to have some success at reducing harm (Wood & Gruenewald, 2004).

The potential for alcohol regulation through policy is substantial, including such measures as controlling supply, shaping drinking practices, and reducing social and physical harm. An example of an alcohol management, policy development model that has been adapted to the needs of Aboriginal communities is the Aboriginal Community Alcohol Harm Reduction Policy (ACAHRP) approach. Developed by the Centre for Addiction and Mental Health, this approach uses a collaborative, consensus-building model to develop policy regulations in partnership with Aboriginal communities (Gliksman, Rylett, & Douglas, 2007). This approach in action has shown effects in several communities including the Mattagami First Nation, Moose Cree First Nation, Wikwemikong Unceded Indian Reserve, and Aamjiwnaang First Nation (Lauzon, Gregoire, Gliksman, & Douglas, 1998; Narbonne-Fortin, Rylett, Manitowabi, Douglas, & Gliksman, 2001).

5.2.4 General prevention principles

An evaluation of the literature from the last 10 years identified key principles related to substance abuse evidence. These provide the basis for the development of a useful principles framework from which to further develop the prevention component of the NNADAP⁴. More work is needed on aligning current efforts with best practices and reviewing program outcomes; thereby strengthening the indigenous evidence base.

⁴ For a comprehensive review of the literature on general principles and guidelines for substance abuse prevention refer to Gifford, 2009, pg 27.

Readers are urged to review not only the detailed report but also conduct their own review of the evidence for particular individual program approaches before implementing policies and programs. The list provided here incorporates the key principles referred to above and is ordered sequentially:

1. Collect accurate local level needs data; differentiate substance abuse problem areas for particular communities.
2. Base the program logic on the needs of the community, best available evidence, and using clear outcome focused planning tools.
3. Clearly articulate a strategy and base this on a coherent program theory.
4. Ensure the following components are in place to maximize effectiveness:
 - a broad spectrum of activities, approaches, and strategies to address variations in substance use among the population, i.e., a sex/gender/diversity lens;
 - a focus on resilience or protective factors and risk factors;
 - a range of both brief interventions and strategies that ensure duration and intensity or booster doses may be required;
 - a range of program theory or approaches, including indigenous theory and harm reduction;
 - a mix of targeted and population-level approaches, as determined by the needs of the community;
 - an approach that addresses social and structural determinants that impact on behavior and health outcomes;
 - a way for programs to influence developmental pathways across the lifespan;
 - an aim to prevent, delay and reduce the use of various substances, in particular, those with the highest prevalence and risks such as alcohol and tobacco;
 - a goal to reduce risky patterns of substance use; and
 - an aim to create safer contexts through a variety of well-designed and executed regulatory and policy initiatives.
5. Monitor and evaluate the program, including process and outcome evaluation, and

- have a data feedback system.
6. Revise the system based on a feedback loop.

5.3 First Nations models of prevention

Seven major reports were reviewed, the majority focused on First Nations in Canada and were prepared by indigenous writers⁵. Several overlapping themes arise from this literature that are relevant to First Nations' approaches to substance abuse prevention:

- there must be recognition of the heterogeneity of First Nations populations across Canada;
- communities expect to self govern and self determine according to local needs and distinct cultural approaches;
- indigenous knowledge is valued in the formation of prevention strategies;
- Aboriginal cultural practices were viewed as having strengths that were beneficial to the consumers of services;
- incorporation of indigenous knowledge and traditions in contemporary substance abuse interventions is a developing field;
- there are likely to be overlaps between contemporary, evidence-based health promotion and cultural practices and traditional indigenous healing; however, culturally specific services take priority over mainstream services;
- most approaches emphasize harmony or balance between aspects of self and community (such as spiritual, emotional, physical and intellectual components), suggesting that a holistic approach/medicine wheel is essential in any prevention models;
- there is also discussion of interconnectedness; healing needs to recognize the connection between animate and inanimate objects, also between individuals, families and communities;
- there is recognition of and value placed on traditional carriers of knowledge, such as healers and elders;

⁵ The National Native Addictions Partnership Foundation, 2008; Graveline, 1998; Jiwa, Kelly, & St Pierre-Hansen, 2008; Wardman & Quantz, 2006; Nechi Training, Research & Health Promotions Institute, 1998; De Leeuw & Greenwood, 2003; Assembly of First Nations, 2006.

- increasingly communities are demanding a strengths-based approach to intervention, recognizing community resilience and capacity; and
- intervention must be understood contextually and entrenched in a comprehension of colonial treatment of Aboriginal populations, current governmental and political trends, and historic and contemporary determinants.

5.4 Findings from key informant interviews

The results of the interviews are presented under three key headings: systems-related challenges, program-related challenges and community-related challenges. In the detailed report, direct quotes from these interviews are used to highlight particular themes and issues raised by participants and to provide examples that illustrate the key areas of concern. A summary of the key gaps and challenges of the NNADAP prevention program are highlighted below.

5.4.1 Systems-related challenges

There are five key areas participants consistently identified as system-related issues: levels of funding and funding arrangements, communication and partnership, reporting and accountability mechanisms, leadership, and impacts of colonization. For the purposes of this report, systems-level challenges refer to components of the wider NNADAP operating at a federal or central level that are not directly related to the delivery of the prevention component of the program itself. The challenges for the NNADAP are expanded on below.

- Current funding levels are inadequate to support a comprehensive approach to substance abuse prevention. One participant commented that an additional 20 million dollars was required just to keep up with the rate of growth and inflation since mid-1980. Participants commented on the length of time they had been waiting for adequate funding and pay parity.
- Funding arrangements, such as transfer agreements that provide for local autonomy, may limit opportunities for an integrated strategic approach nationally and result in less emphasis on addictions specific activities within communities as other services are prioritized.

- Variations in arrangements between provinces make national standards and approaches difficult to achieve.
- Barriers at all levels, including regional, provincial and federal, inhibit effective communication and partnership.
- Lack of clarity regarding support roles, weak linkages between various levels of the program, and high staff turnover mean support and communication are not always effective.
- Reporting and accountability requirements from the funders limit the scope of prevention activities to an outputs focus, which does little to encourage providers to think outcomes or measure effectiveness.
- There is a lack of central leadership, advocacy and political will to drive the changes required of the NNADAP prevention program. Participants commented on slow progress on issues and recommendations from previous reports.
- Colonization of First Nations has established a system that is not conducive to indigenous well-being. A history of colonization and the associated cultural dislocation, loss, grief and damage has left First Nations communities with a legacy of health and social problems and a level of distrust regarding federal level intentions. In particular, policies regarding welfare support, post colonial tribal decision making and leadership, and the creation of reserve communities have implications for continued substance abuse in First Nations reserve communities.

Solutions

While all of the above issues are significant challenges for the NNADAP, participants also highlighted what they thought were potential levers of future change, including:

- opportunities for partnerships and integration with a range of stakeholders including mainstream agencies, other addiction services, and public health, as well as cross-sector partnerships and national and province-wide partnerships;

- strong indigenous leadership and visioning — seen as critical to embracing the changes required and leading the way forward;
- community mobilization and control — seen as an important part of action; and
- rather than starting over, build on existing and developing best practice indigenous models across disciplines and jurisdictions.

5.4.2 Program-related challenges

Program, for the purposes of this report, refers to the prevention component of the NNADAP and includes anything that relates directly to the delivery of the NNADAP, such as planning, implementation and evaluation.

There are six key areas participants consistently identified as program-related issues: the emphasis on treatment; poor data; inadequate use of evidence; narrow prevention approaches; limited integration with other programs; and limited evaluation.

- The majority of participants commented that the priority for the NNADAP is treatment not prevention. While half of NNADAP’s budget goes to prevention, the emphasis tends to be placed on treatment; this creates significant barriers to further development of the prevention component of the wider NNADAP.
- There is very limited data available on which to plan. Plans are broadly based and focus on outputs. Communities that tried to improve data collection were not encouraged or supported by funders to do this. Even when prevention plans are developed, they are compromised by the day-to-day realities of crisis and treatment work.
- The majority of participants stated they did not use “Western scientific” evidence in program planning and intervention. There was some debate about the value or appropriateness of evidence for prevention work.
- Prevention activities were limited to largely school-based activities with some community awareness raising and support through community workshops and diversion activities. There were few examples of wider community development approaches and virtually no policy level initiatives. When policies were implemented,

enforcement was a key problem. The issue of limited approaches to prevention reflects the low priority prevention receives in the wider federal program. Additional evidence of the low priority given to prevention includes limited resources, high levels of acute need, poor planning, and limited use of evidence in planning.

- Program integration, both on reserve and off, varies significantly. Poor levels of integration exist particularly in more isolated communities; other communities demonstrate highly effective levels of integration.
- Evaluation was not carried out in any systematic, robust manner.

While there are many examples of program issues, there are also a number of examples of communities that are attempting to work within best practice guidelines. A number of examples of best practices are contained in the detailed report (Gifford, 2009, pg 55) and include organizations such as Native Drug and Alcohol Association of Nova Scotia (NADACA); Akwesasne Mental Health Program; Healing our Spirit, an HIV prevention network in British Columbia; An Alcohol Policy Project (APP) at TI'etinqox-T'in Government Office in British Columbia; and Siksika and Kahnawake NNADAPs. While some of these communities and providers are in the process of developing best practices and have identified work still to be done, services had a number of working principles in common that aligned with the evidence, such as:

- coordination and integration across services;
- a strong focus on training and support;
- the capacity to gain advice and policy direction from the community;
- high levels of commitment of workers as demonstrated by length of service;
- strong consistent leadership;
- data collection and research that is reasonably well advanced;
- high levels of community engagement and participation;
- well-defined models including logic models and strong indigenous models;

- varied program responses based on community needs;
- plans that include goals, objectives, time frames, and progress indicators; and
- a variety of approaches to raise awareness such as alcohol server training, drinking and driving campaigns, communication and promotion.

The examples were not independently evaluated by the author; they were drawn from participant interview data or literature reviews. As well, not all are NNADAP funded programs; however, they are indigenous prevention programs. It should be noted that the list is not comprehensive and that there are likely other examples not known to the author. She apologizes to those communities not included here.

5.4.3 Community-related challenges

Community-related challenges refer to issues and challenges arising at the community level that impact program delivery. There are overlaps between community and program challenges and issues such as training and role complexity could fit in both community and program spheres. The key issue here is highlighting community-level differences and challenges that arise for workers attempting to implement programs in a community.

- There are significant differences in capacity and capability between communities, resulting in an uneven application of the program. Not all communities have the capacity and/or capability required to deliver on evidence-based practice.
- Not all communities were identified as supportive of multi-theory recovery models, in particular, there was a disconnect between traditional or cultural models of recovery practiced in some treatment centres and reserve communities with models based on Christian values and beliefs.
- There is mixed evidence of role clarity. While role clarity is evident in some well-developed resources and the standard job descriptions of some communities, but in other communities there is limited role clarity. In some instances, workers themselves put limitations on their roles to protect themselves from work related stress. Some work has been carried out provincially regarding role clarification

and manuals have been developed to support this; however, there was little evidence that this was in use systematically.

- The skills and knowledge base for carrying out various prevention roles is variable. Some workers come in with qualifications such as counselling, others come in with no formal qualifications, At times sobriety is a key hiring criteria. Some NNADAP workers were considered not to have appropriate skills and knowledge for dealing with complex and high-need clients, such as those presenting with a combination of mental health and addictions issues. This lack of knowledge sometimes results in inappropriate referrals and poor identification of problems.
- There is a wide range of training options available throughout the country; however, there are a number of barriers to accessing training including community isolation, no standard approach to curriculum, teaching methods that may not be appropriate to the learners, and priorities for workers and communities that may not fit with training provider priorities. The biggest single issue identified is that training and certification are not geared to prevention. Training is instead geared toward personal development and addictions with very little emphasis on population level responses, community development, public health, and prevention theory.
- A large number of participants spoke of the reluctance of community members to engage in prevention activities. Others commented that they have some success at engaging the community.
- As a reliable and available core part of the reserve health system, NNADAP workers are often called on to do a range of tasks that are not part of a prevention role. These include responding to treatment and crisis issues on reserve, for example, car accidents and family violence incidents. Expectations of workers by communities are at times unrealistic, for example, total sobriety, and are sometimes expressed in a manner that is bullying and disrespectful.

- Planning and implementation of ongoing community-wide interventions is made more difficult by the current short-term election cycle for chiefs and councils, which often results in changes to programs and staffing. Implementing community-wide policies that create safer community environments may not always be popular and political systems currently in place are not conducive to these policy changes. In addition, factions that are based on political alliances create barriers to engaging the community in whole of community interventions.
- Some services are significantly constrained by low levels of financial resources and poor facilities. There is not a pool of volunteers to call on in communities to supplement the work being done by prevention workers. Some participants pointed out that cultural activity often requires a level of resources not available in some communities; therefore, these activities are restricted to once or twice a year. The issue of limited facilities was also raised, particularly facilities that can accommodate larger numbers for community-based activities.
- Participants reported various supervision arrangements; however, for the majority of those interviewed, there was little supervision, particularly clinical supervision. When supervision did happen it tended to be administrative supervision.

Community contexts provide a number of both strengths and challenges to the effective implementation of the prevention component of the NNADAP, not least of all the differences in capacity and capability between communities. A significant challenge is the mind shift to community development and prevention, which requires balancing crisis responses with prevention interventions. There is a lack of resources to implement sustainable, culturally based programs and workers are servicing some extremely high-need, diverse populations. NNADAP workers interviewed had a passion for, and understanding of, prevention work but found it difficult to create time and space for this work. Some believed the system they were working with does not allow the space or support for, and at times actively created barriers to, implementing a community development or public health approach to prevention.

6. Conclusions and Recommendations

6.1 Conclusions

Participant feedback on the NNADAP has highlighted significant challenges at all levels of the program; federal, provincial and community. A number of changes are required to renew this national program and bring it in line with current best evidence and to respond to concerns from communities, managers, policy makers, and funders. An updated framework for targeting prevention efforts has been provided in this report along with a set of evidence-based principles for implementing prevention programs. Specific recommendations are based on both the key informant interviews and the evidence.

6.2 Recommendations

This report recommends three key strategic areas for action: *improved planning and funding, evidence-based interventions, and monitoring and evaluation*. The key national partners that could support the implementation of these recommendations are indicated in parentheses.

6.2.1 Improved planning and funding

1. Broaden collaborative partnerships to strengthen indigenous leadership and support for program renewal. This would include getting “buy in” to a paradigm shift in program approach from a single theory approach and addictions focus to a whole of community wellness focus ([Health Canada](#), [Assembly of First Nations](#), [Canada Aboriginal Aids Network](#), [the Indigenous Physicians Association of Canada](#), [the National Native Addictions Partnership Foundation](#), [Canadian Institutes of Health Research](#), [First Nations Addictions Advisory Panel](#)).
2. Develop a clearly articulated strategy and coherent program theory and model for the NNADAP prevention component. Utilize the best possible evidence base and include revised definitions of prevention. A shift to a universal, selective and indicated approach to targeting interventions is proposed. Coupled with this would be adoption of a definition that includes measures that prevent or delay the onset of drug use as well as measures that protect against risk and reduce harm associated with drug supply and use. Utilize external expertise, such as mental health and prevention research, to advise on the program model. The model would

- include a range of approaches such as whole of population, healthy public policy, intervention across the life span, harm reduction and regulatory (Health Canada, National Native Addictions Partnership Foundation, provincial and regional representatives, Centre for Addiction and Mental Health, prevention research groups, public health).
3. Review the existing investment in the NNADAP prevention program to ensure that funds are available to implement the recommendations from this review, and from previous reviews, over the next five years and that adjustments for inflation and growth in programming are included in the revised budget. A previous internal report to Health Canada recommended a 20 million dollar increase was required to adjust for inflation and growth (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel).
 4. Enhance provincial coordination and support mechanisms to implement strategic direction at the provincial level. Make this support accessible to all existing prevention workers and communities. Communication and decision making should flow between all levels more effectively (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives).
 5. Allocate new funding to a limited number of demonstration projects that will advance new and already developing best practice models of addictions prevention for First Nations. Demonstration projects should be community-based, contestable and allocated on the basis of well-defined criteria such as utilization of the evidence base, a clearly articulated model, and capacity of the community to deliver on outcomes. Evaluation of projects should test feasibility, transferability, cost effectiveness, process and outcomes, and build on an indigenous evidence base (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives).
 6. Improve data collection locally and nationally to enable differentiation of substance abuse problem levels, accurate local needs data, and improved national surveillance (Health Canada, Assembly of First Nations, Statistics Canada, Canadian Institutes of Health Research).

7. Improve information networks, locally, regionally, provincially/territorially and federally to enable all communities to participate in planning decisions and system wide changes, include participation by NNADAP workers themselves. This could be achieved by ensuring email networks are strengthened, regional networking meetings are reinstated as required, meetings are held to enable easy access by communities with limited budgets and time is allowed for effective consultation ([Health Canada](#), [National Native Addictions Partnership Foundation](#), [First Nations Addictions Advisory Panel](#), provincial and regional representatives).

6.2.2 Evidence-based interventions

8. Establish a coordinated research strategy within the NNADAP prevention component to ensure that research is conducted in a systematic and sustainable manner as part of the wider NNADAP. A research program may include longitudinal surveillance of population health; access to prevention research, including evidence; support for indigenous methodologies; building of indigenous research partnerships; translation of knowledge to communities; and research to improve planning, implementation and evaluation of program ([Health Canada](#), [Assembly of First Nations](#), [Statistics Canada](#), [Canadian Institutes of Health Research](#), prevention research).
9. Broaden program approaches to include a range of evidence-based practices and principles consistent with the list outlined in section 6.1. Three requirements are necessary for the adoption of the evidence framework. First, the recommendations from this report become part of the program renewal process at a federal level; second, support is given to an evidence-based approach by indigenous leadership at a national level; and third, community capacity is built to enable implementation of the evidence at a program delivery level ([Health Canada](#), [National Native Addictions Partnership Foundation](#), [First Nations Addictions Advisory Panel](#), provincial and regional representatives).
10. In building the evidence base and renewal of the program, recognize the right to self determination by communities, recognize the role of Aboriginal elders and local experts in the development of evidence, support or strengthen local initiatives and programs, and recognize the heterogeneity of First Nations populations across Canada ([Health Canada](#), [Assembly of First Nations](#), [National](#)

Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives, Bands and Councils, traditional healers and ceremonialists).

11. As the evidence indicates, prevent multiple problem outcomes through a multi-component approach (e.g., school, policy, parent, and media programs) with the aim of reducing developmental risk factors, improving mental well-being and enhancing protective factors. Programs should include a whole of community approach as this would serve to change the overall social and cultural environment surrounding substance use and benefit the whole community. As well, programs should have a range of brief interventions and strategies that ensure the duration and intensity or booster doses may be required. Programs should aim to prevent, delay and reduce the use of various substances, in particular, those with the highest prevalence and risks, such as alcohol and tobacco. Programs should reduce risky patterns of substance use through harm reduction approaches and create safer contexts through a variety of well-designed and executed regulatory and policy initiatives (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives).
12. Review the current addictions based certification and training options for NNADAP prevention workers to enable curriculum development that is more in line with the skills and knowledge needed to carry out evidence-based prevention activities. It will be critical to include training in the area of mental health and, in particular, screening or assessment in acknowledgement of the significant role mental health plays in substance misuse. A variety of training options, including distance learning and on-site modules, should be considered to improve training and qualifications of the indigenous prevention work force (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives, current and potential training providers, certification agencies).
13. After the consolidation of the prevention component of the NNADAP, integrate the NNADAP treatment and community intervention services by working collaboratively to (a) ensure appropriate referrals to treatment and effective post-

- care support and (b) balance the needs of both community-wide prevention and treatment. Integrate the NNADAP prevention component with wider community wellness teams and cross sector groups to impact the broader determinants of health (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives, provincial and regional level addiction and prevention programs).
14. Develop community capacity where required to enable the implementation of evidence-based practices. Communities with greater need for capacity and capability building should be given priority through a range of mechanisms such as shared learning and mentorship, support and training from regional networks, more effective research information from the wider NNADAP research program, and greater incentives to work with best practices (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, provincial and regional representatives).
 15. Improve working conditions for NNADAP workers in communities, including ensuring movement toward pay parity, ensuring appropriate qualifications and training are in place to meet evidence-based practice goals, and providing support and supervision to enable the realization of NNADAP expectations (Health Canada, National Native Addictions Partnership Foundation, First Nations Addictions Advisory Panel, employer and employee representatives).

6.2.3 Monitoring and evaluation

16. Ensure First Nations communities exercise data ownership, control, access and possession of all research activity in accordance with indigenous research guidelines developed by the Canadian Institutes of Health Research (Health Canada, Assembly of First Nations, Statistics Canada, Canadian Institutes of Health Research, prevention research, provincial and regional representatives).
17. Develop an outcomes framework for reporting on and accountability of NNADAP prevention programs. Outcome framework models are used in a number of countries to measure national level health priorities; reviewing existing frameworks may be helpful in developing the framework for NNADAP. Developing an overall program logic will also assist with identifying short, medium and long-term outcomes (Health Canada, National Native Addictions

- Partnership Foundation, First Nations Addictions Advisory Panel).
18. Make sure there is a creative mix of qualitative and quantitative baseline and post intervention longitudinal evaluations to ensure that local ideas for program success are included in outcome data (Health Canada, Assembly of First Nations, Statistics Canada, Canadian Institutes of Health Research, prevention research, provincial and regional representatives).
 19. Incorporate process and outcome evaluation in prevention activity through additional resourcing, collaborative research partnerships, training and support (Health Canada, Assembly of First Nations, Statistics Canada, Canadian Institutes of Health Research, prevention research, provincial and regional representatives).
 20. Develop networks and processes to review data from evaluations in order to improve program efficiency and effectiveness. There are many innovative ways to disseminate research findings including video, photos, web sites, brief reports, and regional and national networking meetings (Health Canada, Assembly of First Nations, Statistics Canada, Canadian Institutes of Health Research, prevention research, provincial and regional representatives).

Reference List

- Adelson, N. (2005). The Embodiment of Inequity Health Disparities in Aboriginal Canada. *Canadian Journal of Public Health, 96*, 45-61.
- Assembly of First Nations. (2006). *First Nations Public Health: A Framework for Improving the Health of Our People and Our Communities*. Ottawa: Assembly of First Nations.
- Assembly of First Nations. (2007). *RHS Our Voice, Our Survey, Our Reality*. Ottawa: Assembly of First Nations.
- Assembly of First Nations. (2007). *Regional Longitudinal Health Survey (RHS) 2002/03, Results for Adults, Youth and Children Living in First Nations Communities. Revised second edition*. Ottawa: Assembly of First Nations. Available: www.rhs-erc.c.
- Blackstock, C., Clarke, S., Cullen, J., D'Hondt, J., & Formosa, J. (2004). *Keeping the Promise: The Convention on the Rights of the Child and the Lived Experiences of First Nations Children and Youth*. First Nations Child and Family Caring Society of Canada.
- Brady, M., Sibthorpe, B., Bailie, R., Ball, S., & Sumnerdodd, P. (2002). The feasibility and acceptability of introducing brief intervention for alcohol misuse in an urban Aboriginal medical service. *Drug and alcohol Review (21)*, 375-380.
- Brown, T., Seraganian, P., Tremblay, J., & Annis, H. (2002). Process and outcome changes with relapse prevention versus 12-step aftercare programs for substance abusers. *Addiction, 97* (6), 677-689.
- Canada. Correctional Service of Canada. (1996). *Substance Abuse Treatment Modalities: Literature Review*. Retrieved January 20, 2009 from Correctional Service of Canada: Available: www.csc-scc.gc.ca
- Canada. Health Canada, Drug Strategy and Controlled Substances Programme. (2005). *National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada*. Ottawa: Health Canada.
- Canada. Health Canada. (2008). *First Nations People Living On-Reserve: Health and Safety*. Prepared by Ekos Research Associates Inc. HC POR 07-44. Available: Library

and Archives Canada, Electronic Collection. collectionscanada.ca/electroniccollection/ Amicus No.33959388.

Canada. Statistics Canada. (1991). *Aboriginal Peoples Survey*. Ottawa: Statistics Canada.

Centre for Addictions Research of BC for the British Columbia Ministry of Health. (2006). *Following the Evidence: Preventing Harms from Substance Abuse in BC*. Vancouver: British Columbia Ministry of Health.

De Leeuw, S., & Greenwood, M. (2003). *Recognizing Strength, Building Capacity: Addressing Substance Abuse Related Special Needs in First Nations Communities of British Columbia's Hinterlands*. Centre of Excellence for Children and Adolescents with Special Needs. Prince George: University of Northern British Columbia: Task Force on Substance Abuse.

Dell, C. A., & Lyons, T. (2007). *Harm Reduction for Special Populations in Canada: Harm reduction policies and programs for persons of Aboriginal descent*. Ottawa: Canadian Centre on Substance Abuse.

Embry, D. D. (2000). *The Next Generation Multi-Problem Prevention: A Comprehensive Science-Based, Practical Approach*. Tuscon, Arizona: PAXIS Institute. Manuscript in review.

European Monitoring Centre for Drugs and Drug Addiction. (2008, November). *Prevention Responses to Drug Use in the EU*. Retrieved January 23, 2009. Available: European Monitoring Centre for Drugs and Drug Addiction,. <http://www.emcdda.europa.eu/themes/prevention/responses-in-eu>.

Gallaher, M. M., Fleming, D. W., Berger, L. R., & Sewell, C. M. (1992). Pedestrian and Hypothermia Deaths among Native Americans in New Mexico. *JAMA*, 267(10), 1345-8.

Gifford, H. (2009). *Scan and Analysis of on Reserve Substance Abuse Addictions Prevention Programming*. Unpublished manuscript available on request from Health Canada, First Nations and Inuit Health, Branch.

Gliksman, L., Rylett, M., & Douglas, R. (2007). Aboriginal community alcohol harm reduction policy (ACAHRP) project: A vision for the future. *Journal of Substance Use & Misuse*, 42(12), 1851-1866.

Graveline, F. J. (1998). *Circle Works, Transforming Eurocentric Consciousness*. Halifax, Nova Scotia: Fernwood Publishing.

Hallfors, D., Hyunsan, C., Sanchez, V., Khatapoush, S., Kim, H. M., & Bauer, D. (2006). Efficacy vs Effectiveness; Trial Results of an Indicated "Model" Substance Abuse Program: Implications for Public Health. *American Journal of Public Health*, 96 (12), 2254-2259.

Jiwa, A., Kelly, L., & St Pierre-Hansen, N. (2008). Healing the community to heal the individual, Literature review of aboriginal community-based alcohol and substance abuse programs . *Canadian Family Physician* (54), 1-7 .

Lauzon, R., Gregoire, T., Gliksman, L., & Douglas, R. (1998). Mattagami First Nation's policy to reduce alcohol related harm. *Canadian Journal of Native Studies*, XVIII(1), 37-48.

Levy, J. E., & Kunitz, S. J. (1974). *Indian Drinking: Navajo Practices and Anglo-American Theories*. New York, NY: John Wiley & Sons.

Loxley, W., Toumbourou, J. W., Stockwell, T., Haines, B., Scott, K., Godfrey, C., et al. (2004). *The Prevention of Substance Use, Risk and Harm in Australia: A review of the evidence*. Canberra, Australia: The National Drug Research Institute and the Centre for Adolescent Health.

May, P.A. (1992). Alcohol Policy Considerations for Indian Reservations and Bordertown Communities. *American Indian and Alaska Native Mental Health Research*, 4(3), 5-59.

MacMillan, H., MacMillan, A., Offord, D., & Dingle, J. (1996). Aboriginal Health. *Canadian Medical Association Journal*, 155, 1569-1578.

McGrath, Y., Sumnall, H., McVeigh, J., & Bellis, M. (2006). *Drug use prevention among young people: a review of reviews, Evidence briefing update*. National Institute for Health and Clinical Excellence. Available: www.publichealth.nice.org.uk .

Narbonne-Fortin, C., Rylett, M., Manitowabi, S., Douglas, R., & Gliksman, L. (2001). Achieving consensus for a policy action to reduce alcohol problems in the Wikwemikong Unceded Indian Reserve: Wikwemikong alcohol policy consensus. *Canadian Journal of Native Studies*, *XXI* (1), 161–177.

National Native Addictions Partnership Foundation. (2008). Concerns, Issues and Emerging Requisites For Undertaking Needs Assessments in First Nations. *International Symposium of Needs Assessment and Needs-based Planning for Substance Use Services and Supports*. Toronto: The National Native Addictions Partnership Foundation.

Nechi Training, Research & Health Promotions Institute. (1998). *Literature Review Evaluation Strategies in Aboriginal Substance Abuse Programs: A Discussion*. Ottawa: Health Canada, First Nations, Inuit and Aboriginal Health Branch.

Springer, F., Sale, E., Hermann, J., Sambrano, S., Kasim, R., & Nistler, M. (2004). Characteristics of Effective Substance Abuse Prevention Programs for High-Risk Youth. *The Journal of Primary Prevention*, *25* (2), 171-194.

Thatcher, R. W. (2004). *Fighting Firewater Fictions Moving Beyond the Disease Model of Alcoholism in First Nations*. Toronto: University of Toronto Press.

Trimble, J. E., & Beauvais, F. (2001). Health Promotion and Substance Abuse Prevention among American Indian and Alaska Native Communities: Issues in Cultural Competence. Washington DC: Substance Abuse and Mental Health Services Administration's Centre for Substance Abuse Prevention.

VanderWaal, C. J., Powell, L. M., Terry-McElrath, Y. M., Bao, Y., & Flay, B. R. (2005). Community and School Drug Prevention Strategy Prevalence: Differential Effects by Setting and Substance. *The Journal of Primary Prevention*, *26* (4), 299-320.

Wandersman, A., & Florin, P. (2003). *Community Interventions and Effective Prevention*. South Carolina, Rhode Island: University of South Carolina.

Wardman, D., & Quantz, D. (2006, October). Harm reduction services for British Columbia's First Nation population: a qualitative inquiry into opportunities and barriers for injection drug users . *Harm Reduction Journal*, 3 (30).

Weibel-Orlando, J. (1990). American Indians and Prohibition: Effect or Affect? Views from the Reservation and the City. *Contemporary Drug Problems*, 17(2): 293-322.

Weiss, C. H., Murphy-Graham, E., Pertrosino, A., & Ghandi, A. G. (2008). The Fairy Godmother and Her Warts: Making the Dream of Evidence Based Policy Come True. *American Journal of Evaluation*, 29 (1), 29-47.

Wood, D.S. & Gruenewald, P.J. (2004). *Alcohol Availability, Police Presence, and Violence in Isolated Alaskan Villages*. Paper Presented at the Annual Meetings of the Academy of Criminal Justice Sciences, Las Vegas, NV.