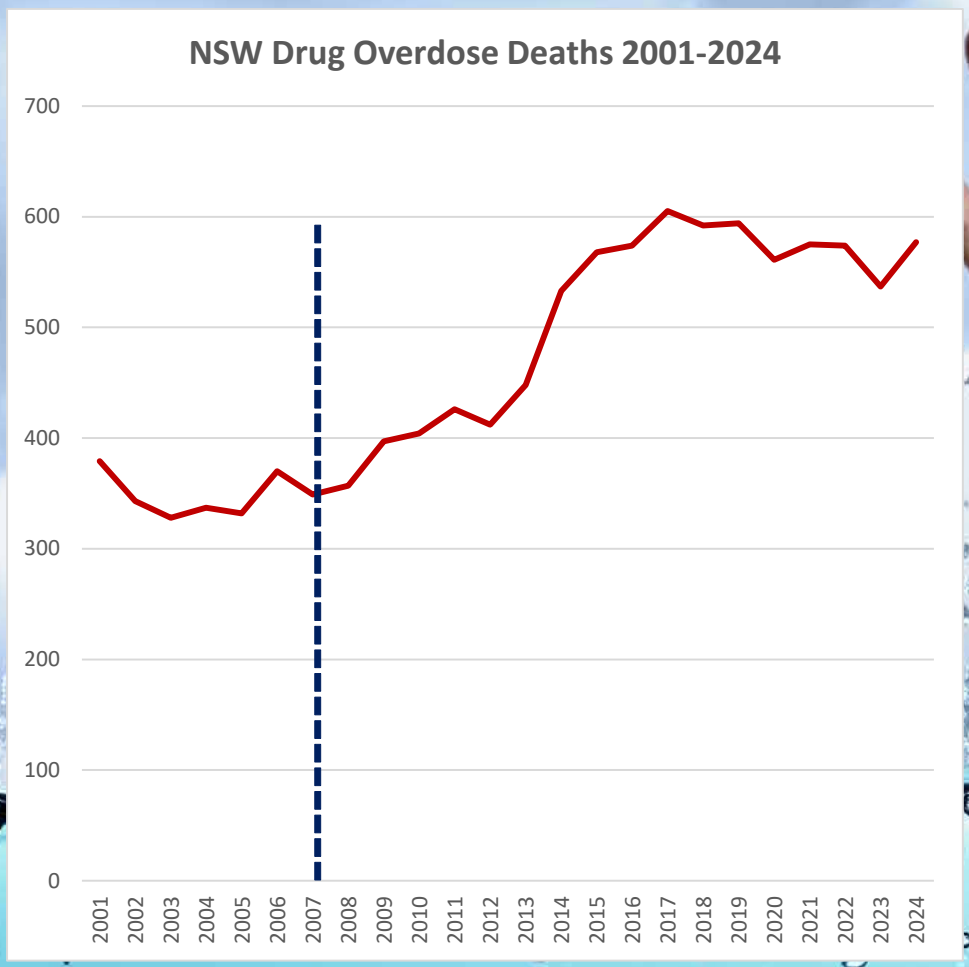
The high price of a failed drug policy



DRUG FREE AUSTRALIA

While the NSW Health current guidance for these submissions clearly states that Harm Reduction programming is sacrosanct in NSW, this document does not argue for its removal. Drug Free Australia supports Harm Reduction insofar as it is strategically geared towards a recovery outcome.

This submission will demonstrate the unquestionble success of a drug policy that prioritises prevention and recovery, with mortality outcomes far superior to a policy which gives Harm Reduction the higher priority. This is evidenced by Australia's most successful past years of reduced overdose deaths nationally between 2001 and 2007. NSW shared in that success, with total drug overdose deaths averaging 340 over those 7 years against 2024's preliminary figure of 577, a figure that will go higher.

photo - www.dreamstime.com - Romolo Tavani

The high price of a failed drug policy



The compassionate answer to reducing drug-related deaths

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Executive Summary

A golden era for prevention and recovery

Australia's drug-related deaths have more than doubled since its most successful era of fighting drugs and related harms ended in 2007. From 2001-2007, under a national drug policy that gave higher priority to prevention and recovery, deaths averaged 961, yet in 2024, despite this number being preliminary and with more deaths to be counted in as coroners' reports are finalised, the number stands at 2,091. From 2008 on, Australian drug policy has failed Australians, replicating a similar failure from 1985-1998.

Before the golden era

Australia moved to a Harm Reduction framework called Harm Minimisation in 1985, the world's leader with its novel Harm Reduction approach. ***Under its Harm Reduction priority illicit drug use went to the highest levels in the OECD developed world by 1998***, effectively double that of almost any OECD nation. Opiate overdose deaths peaked in 1999 at 7 per 100,000, with the media clamouring for change.

1998-2007 - Prevention/Recovery prioritised

In 1998 the Tough on Drugs policy commenced, giving drug prevention, rehabilitation and drug interdiction precedence over harm reduction. Use of any illicit drug decreased 39%, with opiate deaths reducing by 67% (2.2 /100,000) through to 2007.

In 2007, Tough on Drugs was scrapped, with Harm Reduction again given the ascendency. Illicit drug use increased 34% by 2022, ***and drug-related deaths more tan doubled by 2024. Sharp increases in drug use and drug related deaths under a predominant post-2007 Harm Reduction approach holds true for every illicit drug type, as well as alcohol use.***

Australia is perhaps the world's only country that can compare the results of prioritised prevention and recovery against two eras of prioritised Harm Reduction, where the drug policy era from 1998-2007 acts as a quasi-experimental control against the other two eras.

The elements of that success

This document, other than highlighting to NSW Health the enormous success of prevention and recovery priority, also gives some background information behind the successful drug policy era. Drug Free Australia recommends that NSW resolve to reverse the failure of increasing drug-related mortality nationally.

We know exactly what works

In the last chapter we compare the drug prevention results of four countries:

Sweden	- reduced student illicit use **80%**
Iceland	- reduced student illicit use **60-90%**
Australia	- reduced illicit all-ages use **40%**
USA	- reduced student use **50-70%**

The 2022 survey of 21,000 Australians and their attitudes to illicit drug use shows they want less drug use, not more. Of the drugs that activists want to decriminalise, 99% of Australians do not give their approval to the use of heroin, 99% to use of speed and ice, cocaine (97%) and ecstasy (95%).

Drug Free Australia urges NSW Health to simply look at the evidence and formulate strategies informed by that evidence.

The track-record of Australia as Harm Reduction's global pioneer

A golden era for prevention and recovery

To analyse the outstanding Australian 2001-2007 success in reducing opioid mortality by 67% and overall drug use by 39%, it is important to understand the national priorities before and after this golden era of drastically reduced drug harm in the Australian community.

Earliest drug policy

The United Nations' 2008 document on Australia's drug policy success explains its approach from 1912 through 1985 thus,

Australia was also among the first countries to ratify the first international drug conventions (starting with The Hague Convention of 1912 which was ratified in 1914) as well as the subsequent drug conventions of the League of Nations and, after World War II, the drug conventions of the United Nations. As a consequence it followed rather restrictive drug policies until the mid 1980s. The restrictive policies proved to be successful until the mid 1960s. However, as of the late 1960s drug consumption started to increase and continued rising over the next few decades, despite the increase in penalties throughout the 1970s. In the early 1980s, as HIV/AIDS began to affect Australian society (first amongst the gay and lesbian communities), government officials feared that it could also spread rapidly among injecting drug users. It was, in fact, the threat of an epidemic of HIV/AIDS spilling over from the intravenous drug user population to the general public, which was the impetus for 'harm minimisation' as a policy goal in Australia.



Introduction of Harm Minimisation

As per the text of the Guardian article copied below, Australia led the world in 1985 in initiating a Harm Minimisation national drug policy for its citizens.



As the article describes, its concept of Harm Reduction in 1985 was novel to UN participant countries. The Guardian records:

On 2 April 1985, the then prime minister, Bob Hawke, convened a meeting in Canberra with all

six state premiers and the chief minister of the Northern Territory. The special premier's conference, usually referred to as the "drug summit", was said to be the first meeting of the prime minister and premiers since the second world war to discuss anything other than finance. Of the eight governments represented, five leaders (Hawke; Neville Wran, NSW; John Cain, Victoria; John Bannon, SA, Brian Burke, WA) represented Labor governments while three leaders (Joh Bjelke-Petersen, Queensland; Robin Gray, Tasmania; Ian Tuxworth, NT) represented National or Liberal party governments.

One of the items raised and approved at the drug summit, along with a raft of other decisions, was a proposal to adopt "harm minimisation" as Australia's official national drug policy. This decision was to have far reaching repercussions.

When Australia adopted harm minimisation in 1985, both the term and the concept were novel in other countries and in the UN system. *But harm reduction, the preferred term outside Australia, has now become the mainstream global drug policy with all of the major UN organisations responsible for drug policy, as well as international organisations like the Red Cross. While there are still some exceptions to this trend, in countries such as Sweden, Russia and Saudi Arabia, and in a few minor UN organisations with responsibility for drug policy, these are diminishing. And while US officials are still required to avoid using the term "harm reduction", US opposition to harm reduction is also declining.*

In summary, Australia's world-leading Harm Reduction policies have been in place for over40 years and have led to the world following suit, with Harm Reduction now central to the drug policy of most nations across the world.

What is important to this submission and for any NSW Health individual that has compassion for the lives of those addicted to illicit drugs, is results. Reduced drug-harm and deaths should be the final arbiter of strategic directions and we will show that they must prioritise prevention and recovery.

Results of drug policy 1985-1998

Australia statistically tracks many aspects of its drug policy, making Australia a well-evidenced case study for the success or failure of prevention, recovery and Harm Reduction policies.

From the first implementation in 1985 of the new Harm Minimisation policy, use of the most predominant drugs according to the National Drug Strategy Household Surveys showed very substantial increases between 1988 and 1998, where 1998 was the survey in which drug use peaked at its highest levels. Metropolitan use increased as follows:

- **Amphetamine** increased 500%
- **Cannabis** increased 300%,
- **Cocaine** increased 400%
- **Ecstasy** increased 750%
- **Heroin** increased 300%

(using heroin deaths as a proxy for use in 1988 in the absence of a percentage).

Table 2: *Standardised[a] rates of recent use of licit and illicit drugs in the past 12 months, by region, Australia, 1988–1998 (%)*

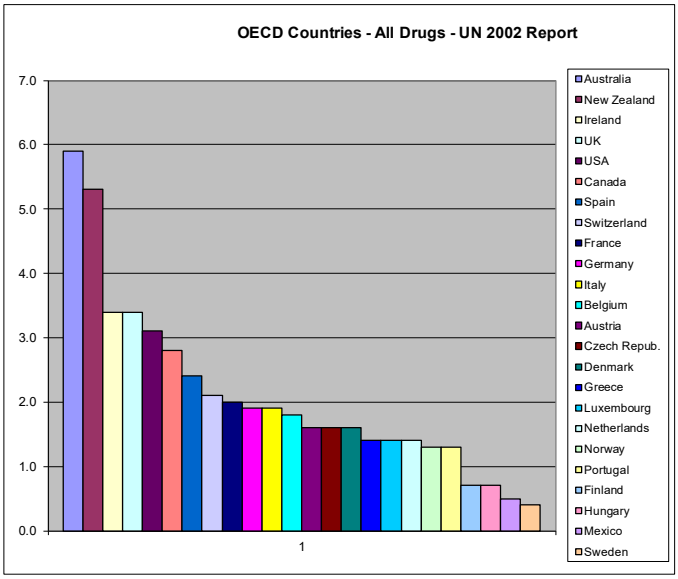
	Year of survey				
Substance	**1988**	**1991**	**1993**	**1995**	**1998**
Metropolitan					
Amphetamines	1.0	2.9	2.1	2.6	4.8
Barbiturates[b]	0.9	1.6	0.4	0.2	0.4
Cannabis	8.1	15.6	15.1	15.5	24.7
Cocaine	0.4	0.8	0.6	0.7	1.6
Ecstasy	0.4	1.3	1.4	1.4	3.0
Heroin	n/c	0.5	0.2	0.4	0.9
Inhalants	0.4	1.1	0.6	0.7	1.4
Injecting	0.5	0.6	0.6	0.7	1.1
LSD	0.9	2.2	1.7	2.1	4.4
Methadone[c]	n/c	n/c	n/c	n/c	0.3
Painkillers[b]	38.6	76.2	2.1	3.8	6.2
Steroids	n/c	n/c	0.1	0.1	0.2
Tranquillisers[b]	7.9	9.6	1.0	1.0	3.5
Regional					
Amphetamines	0.0	2.0	1.5	1.1	3.3
Barbiturates[b]	0.5	0.8	0.0	0.2	0.1
Cannabis	7.3	12.1	**10.5	**10.9	*18.7
Cocaine	0.0	0.6	0.0	0.4	1.2
Ecstasy	0.0	0.8	**0.3	0.2	2.2
Heroin	n/c	0.0	0.0	0.2	0.8
Inhalants	0.5	0.8	0.3	0.2	0.8
Injecting	0.0	0.0	0.5	0.4	0.7
LSD	0.0	0.8	0.8	**0.7	**0.3
Methadone[c]	n/c	n/c	n/c	n/c	0.0
Painkillers[b]	26.9	72.4	0.8	3.5	4.7
Steroids	n/c	n/c	0.0	0.2	0.0
Tranquillisers[b]	4.5	10.5	0.5	0.4	**2.2

Notes:
(a) 1991 persons 14+ years standard population
(b) 1988–1991 questions did not distinguish between medical and non-medical use
(c) diverted methadone
* p<0.01
** p<0.05
n/c = data not collected in that year

Regional use saw increases that were not as substantial as for Australian cities, but nevertheless as high as 300% for some drugs.

Australia's drug use against other OECD countries by 1998 made it the world leader amongst developed economies, as per the following graph (where Australia's 1998 data was the latest available for that United Nations' 2002 report) which shows an aggregated average of the five main illicit drug types. New Zealand followed in second place, having also adopted harm reduction programming with needle exchanges first opening in 1987.

Given the isolation of both countries, with no common borders shared with other nations, the increased drug use in both early-initiating Harm Reduction nations is extraordinary.



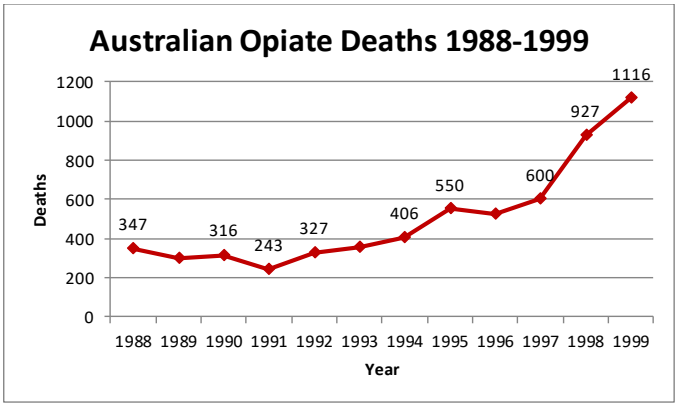
In contrast, the USA and UK, predominantly the homes to the 1960s counter-culture movement that spawned the resurgence of illicit drug use after 50+ years of negligible drug prohibitionary use, were significantly below the Oceania countries.

Note from the graph above that almost every OECD country has less than half Australia's drug use. Sweden, which had virtually no Harm Reduction programming and a zero tolerance approach to illicit drug use, had the lowest use.

High drug use matched by high mortality

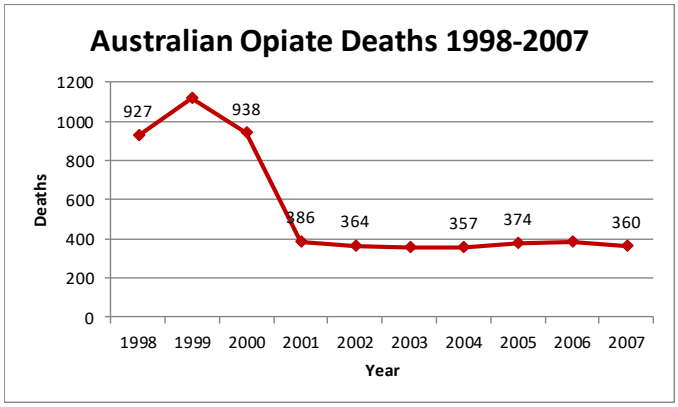
The enormous increases in drug use under the initial phase of Harm Reduction were matched by exponential increases in drug-related deaths, particularly with opiates. Heroin supply was plentiful and therefore cheap leading to a sharp uptake of the drug in the late 1990s.

These statistics became the centre of media attention by 1999, the year when opiate-related deaths peaked at 1,116 deaths for the year as per the graph below.



Prevention & Recovery priority - 1998 to 2007

The very marked, accelerating Harm Reduction statistics for both use and deaths were entirely reversed by the time the 2001 Australian National Drug Strategy Household Survey was conducted.



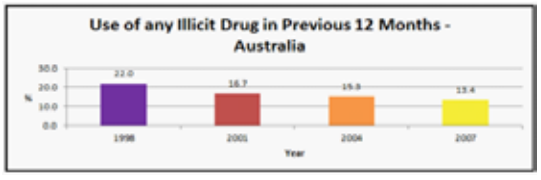
Those reversals were the result of the John Howard Federal Government, elected in 1996, implementing a central focus on drug prevention while nevertheless preserving the existing Harm Reduction programming. The name of the new drug policy mix was titled Tough on Drugs.

An excellent description of Tough on Drugs from the 2008 UNODC report on Australian drug policy notes:

The strategy strengthened supply and demand reduction activities, improved and clarified community messaging, and increasingly built on research and evaluations to guide policy development. In parallel, the establishment of the Australian National Council on Drugs helped to incorporate the know-how of the community of experts working in the various fields of drug control at the federal level and in the various States. Significantly, it helped to substantially increase the overall drug budget for the implementation of the Federal Australian Government's strategy (AUD$1.3 billion over the 1998-2005 period). The total anti-narcotics budgets of the national and state governments was estimated at AUD$3.2 bn in the fiscal year 2002/03, equivalent to 0.41% of GDP (up from some 0.1% of GDP a decade earlier), one of the highest such proportions among the industrialized countries (almost three times as much as the West European average (0.15%) and close to the ratios reported from the USA (0.47%). Australia also experimented successfully with rather broad powers of the police and the establishment of drug courts.

1998-2007 - Tough on Drugs decreases use

The new spending and public messaging on drug prevention and rehabilitation in Australia led to decreases in illicit drug use by 39%.



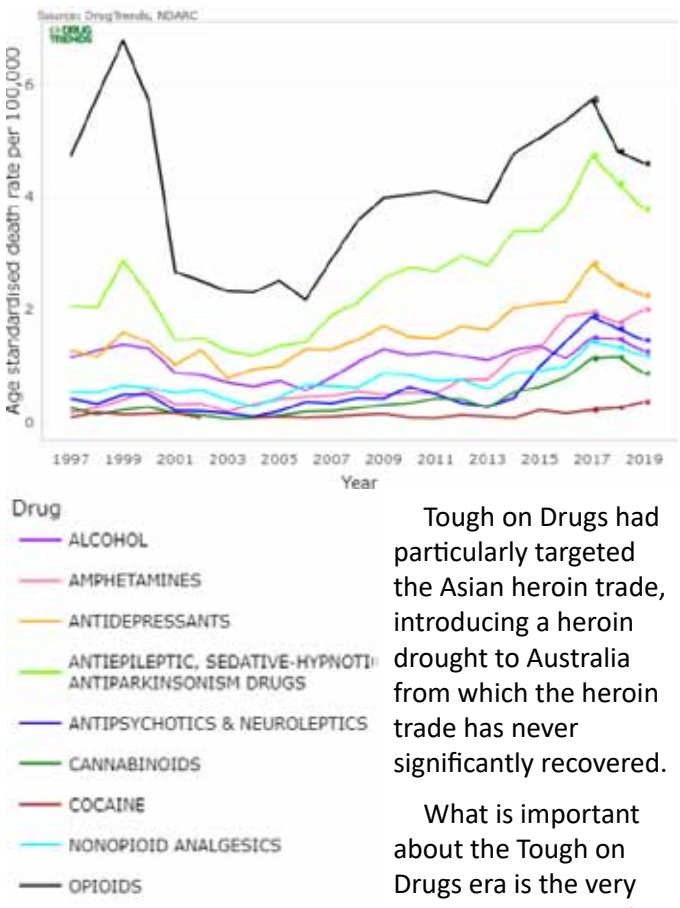
The NDSHS report for 2010 below provides a comprehensive table detailing these reductions in use. There can only be conjecture on significantly greater decreases without the sharply increased drug use and mortality associated with prioritised Harm Reduction running interference.

Table 2.1: Summary of recent[a] drug use, people aged 14 years or older, 1993 to 2010 (per cent)

Drug/behaviour	1993	1995	1998	2001	2004	2007	2010
Illicit drugs (excluding pharmaceuticals)							
Cannabis	12.7	13.1	17.9	12.9	11.3	9.1	10.3
Ecstasy[b]	1.2	0.9	2.4	2.9	3.4	3.5	3.0
Meth/amphetamines[c]	2.0	2.1	3.7	3.4	3.2	2.3	2.1
Cocaine	0.5	1.0	1.4	1.3	1.0	1.6	2.1
Hallucinogens	1.3	1.9	3.0	1.1	0.7	0.6	1.4
Inhalants	0.6	0.4	0.9	0.4	0.4	0.4	0.6
Heroin	0.2	0.4	0.8	0.2	0.2	0.2	0.2
Ketamine	n.a.	n.a.	n.a.	n.a.	0.3	0.2	0.2
GHB	n.a.	n.a.	n.a.	n.a.	0.1	0.1	0.1
Injectable drugs	0.5	0.5	0.8	0.6	0.4	0.5	0.4
Any illicit[d][g]	14.0	16.7	22.0	16.7	15.3	13.4	14.7

Tough on Drugs - 67% decrease in mortality

The graph below from official Australian mortality 'Drug Trends' statistics shows the effect of Tough on Drugs on opiate overdoses, a 67% drop in deaths, significantly greater than the overall decrease in mortality for ***all*** illicit drug types as per NDARC Drug Trends at the top of the following column.



Tough on Drugs had particularly targeted the Asian heroin trade, introducing a heroin drought to Australia from which the heroin trade has never significantly recovered.

What is important about the Tough on Drugs era is the very apparent reversal of

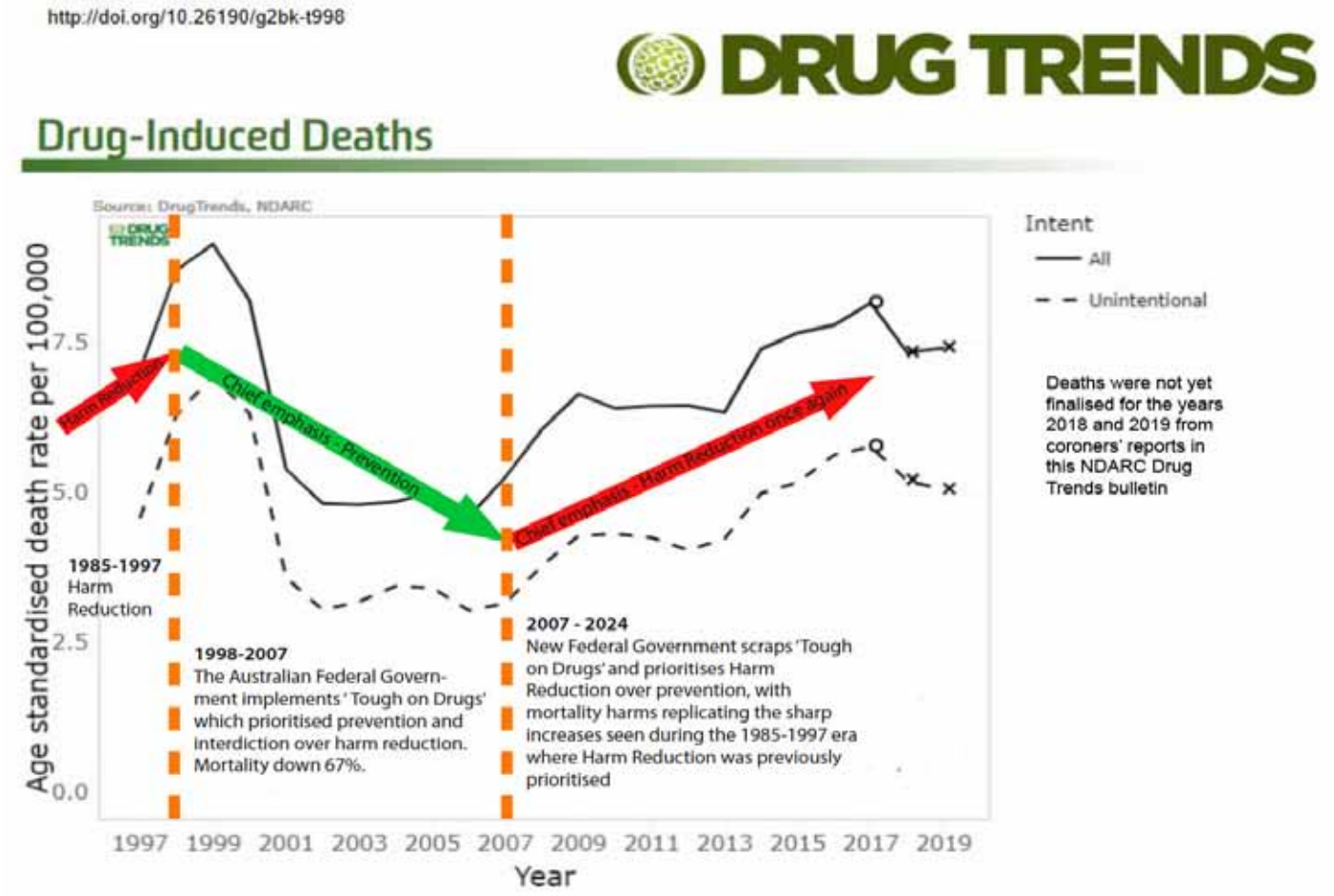


Figure 2. Age-standardised rate (per 100,000 people) of drug-induced deaths for the Australian population, by intent, 1997-2019.

Australia's drug 'problem' as it was then positioned by the Australian media.

Tough on Drugs' reversals of HR increases

From 1985 to 1999 there had been a very evident acceleration in opiate-related deaths, where Harm Reduction policies had been associated with exponential increases in illicit drug use and exponentially increasing drug-related deaths and harm, the very thing it was tasked with reducing. This was failure on any accounting.

With the introduction of Tough on Drugs and its more intentioned strategy of drug prevention there was a dramatic and instant reversal in drug use, and after 1999, when the Tough on Strategies really began to bite, an immediate and dramatic reversal in drug-related deaths.

There will always be the objection that correlation is not causation, but in the absence of any viable confounder producing these reversals, it should also be remembered that wherever there is causation there is also correlation. Causality is thereby suggested.

Changes in drug supply outside of those directly caused by the Federal strategy can be dismissed on the grounds that mortality from EVERY drug-type rises and falls in lockstep with the changes in drug policy. A review of unemployment statistics shows no correlation. There were no changes to mortality definitions related to illicit drug use. So our conclusions are entirely warranted.

Adding weight to our conclusions, prevention policies are an efficient and sufficient cause which have been proven in countries like Sweden and Iceland to produce exactly the same reversals experienced by Australia. The graph at top of the previous column, where opiate-related deaths (black line) are adjusted per capita year by year, demonstrates just how significant was that sharp reversal of trajectory.

2008-2017 - the accelerating dynamic returns

With the newly elected Rudd Federal Government scrapping Tough on Drugs in 2008, giving priority back to harm reduction rather than prevention and recovery, the same dynamic of accelerated harm is very back in play as per the graph in the previous column. This replicates the sharp and accelerating increases in drug deaths that typified the pre-Tough on Drugs policy regime.

i.	**Opioid deaths** increased 261%
ii.	**Antiepileptic deaths** increased by 336%
iii.	**Antidepressant deaths** increased by 212%
iv.	**Non-opioid analgesic deaths** increased by 209%
v.	**Alcohol deaths** increased by 273%
vi.	**Amphetamine deaths** increased 443%
vii.	**Antipsychotic deaths** increased 588%
viii.	**Cannabinoid deaths** increased 565%
ix.	**Cocaine deaths** increased 289%

The tide that lifts all boats

Countering once again the objection that the reversals in opiate deaths may have been more to do with opiate markets than Tough on Drugs, the same graph topping the previous page shows the same trend across every illicit drug type - a Harm Reduction priority lifts all boats and prevention does the opposite with all drugs. Decreases start in 1999 and increases resume in 2008 when the well-funded prevention emphasis was removed to concentrate rather on binge alcohol consumption.

Why does Harm Reduction produce harm?

Australia, as the initial world leader in implementing the new approach of Harm Reduction, has seen substantially increased drug harm whenever Harm Reduction is prioritised above prevention and recovery.

Because the Tough on Drugs era acted as a quasi-experimental control, sandwiched between two time-periods where Harm Reduction was given priority over prevention, in the absence of suggested or viable confounders there is an incontrovertible relationship between Harm Reduction and increased harm and deaths.

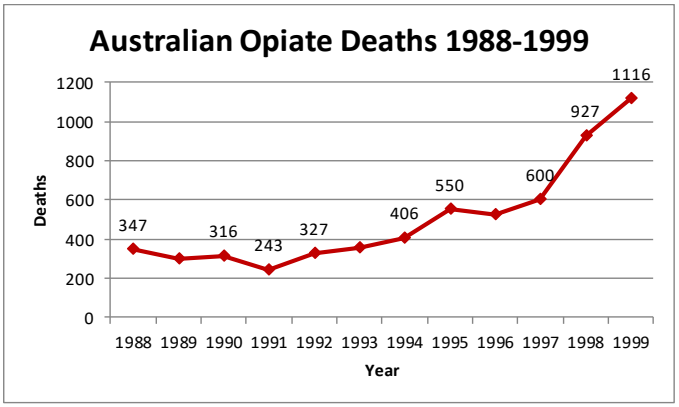
The conclusion should be that Harm Reduction generates increased harm. There is therefore a dynamic at play within its founding philosophy and practice which seeds accelerated harm. The prioritisation of prevention and recovery is thereby beyond contention.

The mechanics of Australia's success

2000-2007: 1,700 NSW lives saved

On the most conservative calculation, the Federal drug policy from 2000-2007 saved a minimum 1,700 lives.

As seen in a previous graph of opioid overdose deaths immediately below, deaths were trending steeply upward by 1999 before that trend was reversed. If that



accelerating trend had continued, thousands more NSW lives would have been lost between 1999 and 2007. But national reductions in overdose deaths from 2000 to 2007 saved the lives of around 5,000 Australians if mortality had otherwise gone no higher than the 1999 level throughout those years. Because NSW consistently had 1 out of three deaths nationally, there were a minimum 1,700 families saved the grief of losing a family member to drugs.

These figures remain important to NSW given that it is currently witnessing overdose deaths ranging between 2024's (as yet preliminary figure) of around 580 drug-related deaths to 2017's 605. Drug Free Australia's stance is that compassion demands a drug policy which will save lives rather than escalating loss.

Elements of the 1998 Federal policy

The Federal drug policy from 1998 to 2007 had three pillars, **one of which is recognisably less relevant to State Governments.**

They were:



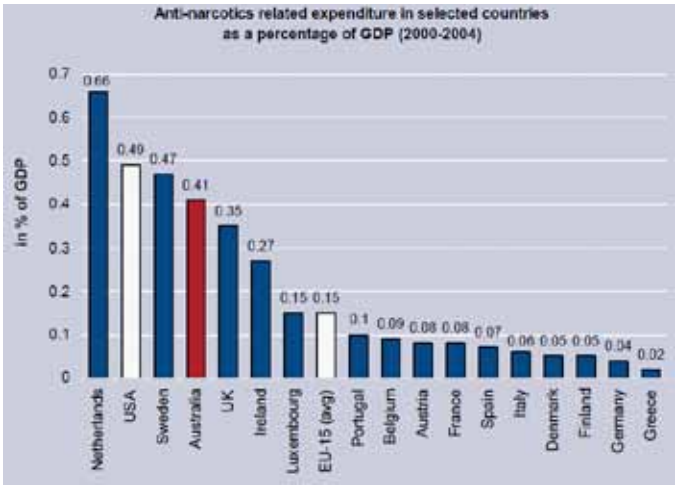
Given the Federal nature of interdiction, State Governments would do well to follow the model for the remaining pillars of prevention and recovery.

Harm Reduction was not scrapped

The Federal drug policy, while giving the highest priority to the above, did not abolish Harm reduction programming. Drug Free Australia recognises that NSW Health has stipulated no removal of Harm Reduction programming and the Federal policy on harm reduction is thereby relevant. Nevertheless our stance on the Federal policy is that results would have been even better if the harm reduction programming had been tasked with moving drug users towards recovery, which is our evidenced position on harm reduction interventions.

Drug policy funding increased

It is notable that increased funding was contributed to the 1998-2007 Federal initiative. Very significant expenditures have gone towards decreasing Sttae road tolls in past years, where seemingly no expense has been spared. For Tough on Drugs the Federal Government quadrupled the drug budget in 1998, aligning Australia with other countries intent on decreasing drug-related mortality.



Integrated approach

The Federal drug policy integrated 8 key elements - school education, recovery, interdiction, media messaging, research, drug courts, increased police powers and monitoring & evaluation as part of the increased drug policy spend.

Giving a little more detail on some of these elements:



School education

The National School Drug Education Strategy (NSDES) commencing 1999 had $18 million in funding over a four year period. It aimed to strengthen drug education in schools across Australia, including through state and territory education projects, teaching resources, parent involvement and partnerships between schools and communities, thus containing elements of resilience programming. It sought also to Improve students' knowledge of drugs and their dangers.

Media campaign

Television advertising such as this and this was used to put Australia's drug problem, which was then the highest in the developed world, front and centre with the Australian public. Every household with children in Australia was posted a booklet on how parents should talk to their children about drugs.

The Prime Minister also appeared on the Nine Network, then the most watched channel in Australia. An example of the government messaging can be found in one of the interviews:

GRIMSHAW:

Good morning. Clearly you think that parents are an under-utilised resource in fighting the drug problem, but I guess most parents would say that they do as much as they possibly can.

PRIME MINISTER JOHN HOWARD:

Well most of them do Tracey, I'm not suggesting for a moment that parents are falling down on their job, I'm merely and the Government is encouraging parents even more because they are in the end the people who can most influence their children. 70% of children in the survey we did for this campaign said that they would be influenced by their families and this is a resource that is there twenty-four hours a day, seven days a week and what I am saying to Australian parents is redouble your efforts to talk to your children in the appropriate way and the booklet we send out in a non-hectoring fashion suggests ways in which that may occur.

GRIMSHAW:

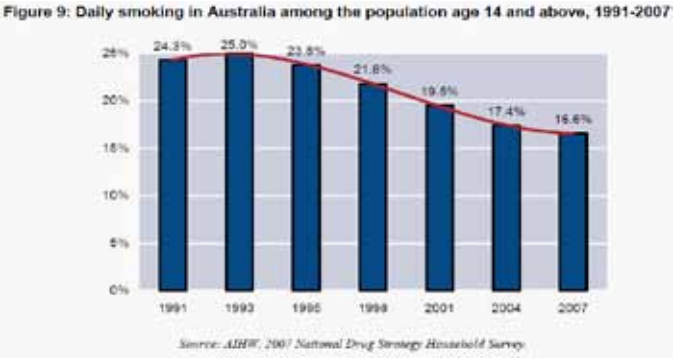
And what about to those people like Alex Wodak from the Drug Law Reform Foundation who says that these campaigns don't work, mass media isn't going to stop people from using drugs and $27 million would buy a lot of treatment programmes?

PRIME MINISTER:

Well I don't agree with him. These mass media

campaigns are part of the general approach. They have worked in the past. Remember the AIDS programme? That worked, that helped. We have been more successful than many other countries in curbing this threat of AIDS. The mass media campaigns about tobacco consumption have helped. Mass media campaigns about a lot of things, they're part of it. But see this is really a mass media campaign to remind people that you've got a resource right there at home. That's what this is about.

Backing the Prime Minister's surmise on the power of media campaigns, the graph below shows the success of the campaign against tobacco and its harms, where Drug Free Australia recommends similar campaigns against illicit drug use.



Recovery

Under the Federal policy the Government had spent $303 million on rehabilitation, treatment, education and research by December 2000. As an example of the priority given to recovery, in 2001 the government announced an additional $109 million package, including $60 million over four years for non-government treatment grants.

In 2004 almost $18 million was announced for 64 non-government organisations to provide treatment, rehabilitation and support services. The government reported that more than $123 million had been provided to over 200 projects through the treatment grants program since 1998.

Major decreases in mortality from every drug type can be significantly attributed to the increase in recovery placements and reduced wait lists.

Commitments that yielded real results

There can be no question that the Federal drug policy had very significant outcomes.

If NSW Health is genuinely consulting to gauge how to get better drug policy results it need look no further.

We know exactly what works

SUCCESSFUL INTERVENTIONS

Governments must follow Sweden's success

In 2007 the United Nations Office on Drugs and Crime (UNODC) produced a booklet titled Sweden's Successful Drug Policy – A Review of the Evidence.

On pages 14 and 15, the UN document spells out the aim of Swedish drug policy.

The goal of society's efforts is to create a drug-free society. This goal has been established by Parliament and has strong support among citizens' organizations, political parties, youth organizations and other popular movements." The bill encouraged people to play an active role, stating that "everybody who comes in contact with the problem must be engaged, the authorities can never relieve [individuals] from personal responsibility and participation. Efforts by parents, family, friends are especially important. Also schools and non-governmental organizations are important instruments in the struggle against drugs.

This vision of a drug-free society still remains the overriding vision. The ultimate aim is a society in which drug abuse remains socially unacceptable and drug abuse remains a marginal phenomenon. In this visionary aim, drug-free treatment is the preferred measure in case of addiction and prosecution and criminal sanctions are the usual outcome for drug-related crime."



The Swedish drug policy has had the support of 96% of Swedes. The priorities are:

- Coerced rehabilitation (more humane than jail)
- Education
- Thoughtful and caring policing while maintaining criminal sanctions

This means that decriminalisation of drug use is seen as an impediment to seeking a drug-free society.

Following are graphs from the UN report showing the percentage of Swedish high school age young people (aged 15-16) and Swedish conscripts (aged 18-19) that have ever experimented with illicit drugs. Sharp decreases in illicit drug experimentation are evident in the 80's when the Swedes heavily funded their restrictive program, and then increased in the 90's once they relaxed funding for their drug program due to a poorer economy. ***In 2004, the Swedish government admitted it had become too relaxed about illicit drug use, and increased funding again***. High school student

Figure 5: Life-time prevalence of drug use among 15-16 year old students in Sweden, 1971-2006

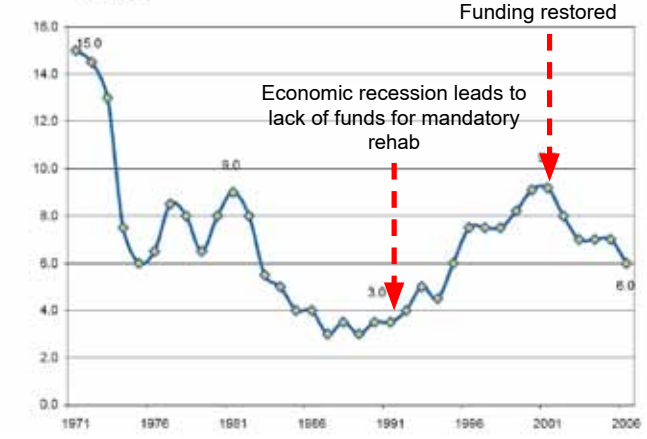
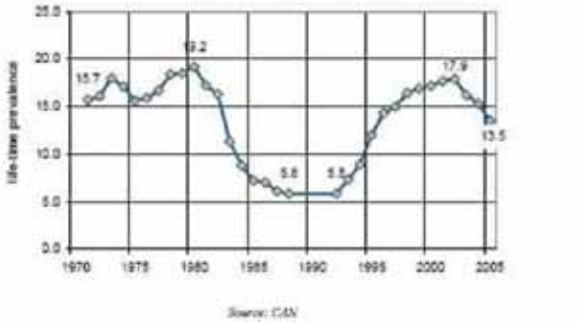


Figure 6: Life-time prevalence of drug use among military recruits in Sweden, 1971-2005



lifetime prevalence for illicit drug use was back to 6% in 2006.

A comparison of EMCDDA 2000 lifetime prevalence percentages for high school age young people between Sweden and the Netherlands is instructive. (The Netherlands claimed that its soft drug policies would keep their drug use down).

Note that the Netherlands did not reach Sweden's initial levels of drug use until the 80's. Many other European countries did not equal Sweden's 1971 levels until the 90's.

Netherlands	15%*	(1980's)	31.7%	(1999)
Sweden	15%	(1971)	7.7%	(1998)

* *This figure is for cannabis alone (typically other drugs add 1-2% for most European countries)*

These low percentages of lifetime prevalence for young people translate to very low levels of Last 12 Months illicit drug use for surveyed Swedish respondents, as compared to the Netherlands and reflect dramatically different outcomes for each country.

Iceland shows what kind of education works

A resilience-based approach to drug prevention was very successfully trialled in Iceland, as reported in the journal, Substance Abuse, Treatment, Prevention and Policy 2008, 3:12. Adolescent cannabis use was reduced by 65% as per documentation at Appendix A.

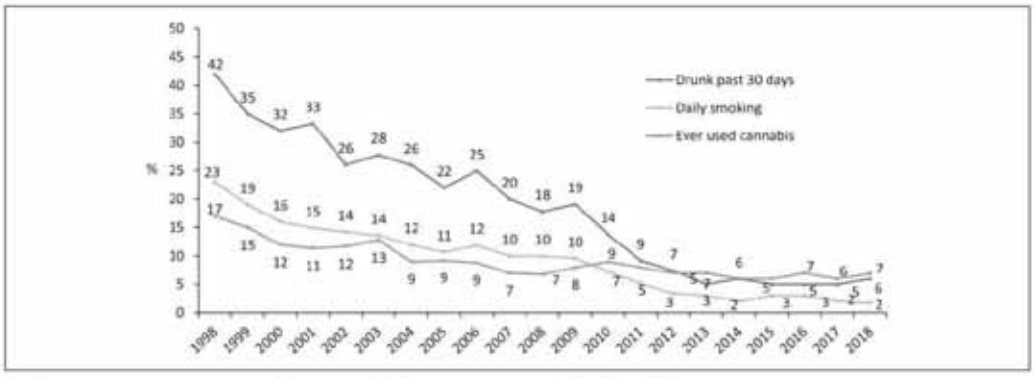


FIGURE 2 Annual Percentage of Self-Reported Substance Use Among Icelandic Adolescents, 1998-2018
SOURCE: Kristjansson et al. (2016).

Drug Free Australia has communicated with Jón Sigfússon, a Director of the Icelandic Centre for Social Research and Analysis, Reykjavik University, and he has identified the following elements in terms of their success: He writes,

For those of you who have less time I take the liberty to quote a few lines from the paper:

... The results from the Icelandic national surveys were used to develop an effective prevention approach with a broad-scale and systematic assessment of the risk and the protective factors that predicted adolescent substance use in Iceland. The key components of this prevention approach included:

• Educating parents about the importance of emotional support, reasonable monitoring, and increasing the time (we don't have an emphasis on this...) they spend with their adolescent children.

• Encouraging youth to participate in organized recreational and extracurricular activities and sports.

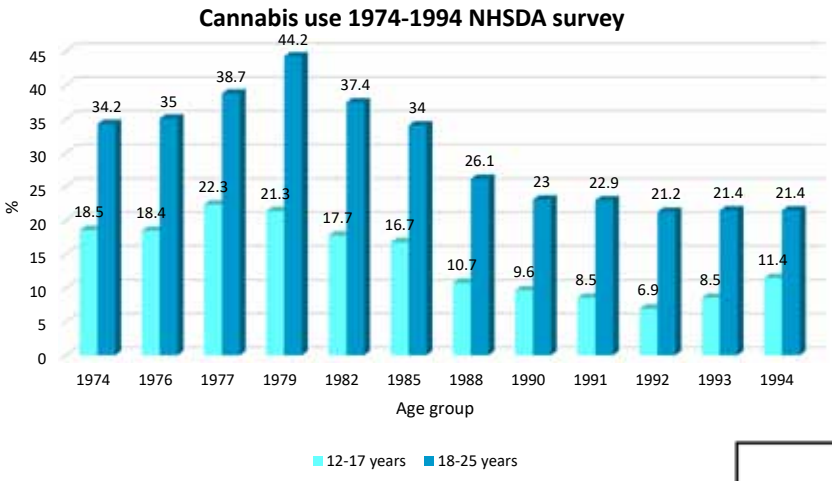
• Working with local schools in order to strengthen the supportive network between relevant agencies in the local community.

The research underlined the importance of the adolescent-parent relationship, the powerful influence of the peer group, and a commitment to facilitate the participation of adolescents in guided recreational and extracurricular activities, such as sports and organized youth work. The research helped to conceptualize the prevention effort as one that sought both to reduce the potentially-modifiable risk factors for substance use while at the same time strengthening community-level protective factors. Thus, the approach focused not only on reducing risk factors, but also on mobilizing society to foster responsible guardianship, community attachment, and informal social control, all on the local community level. This effort has come to be known as the Icelandic Model of Adolescent Substance Use Prevention. It is important to demonstrate that this approach is not merely a "program" in the conventional sense with a given time frame, but rather a long-term effort to alter society on behalf of young people in Iceland in order to decrease the likelihood of adolescent substance abuse...

The success of the USA's Just Say No

The most maligned prevention program of them all is the US Just Say No campaign, which was initiated by Nancy Reagan at the beginning of the 1980s.

Yet a review of the official US data shows a 70% decrease in cannabis use by 1992 amongst high-school age young people and a 50% decrease amongstcollege-age young people as per the graph below. In 1992 billionaire George Soros began funding organisations



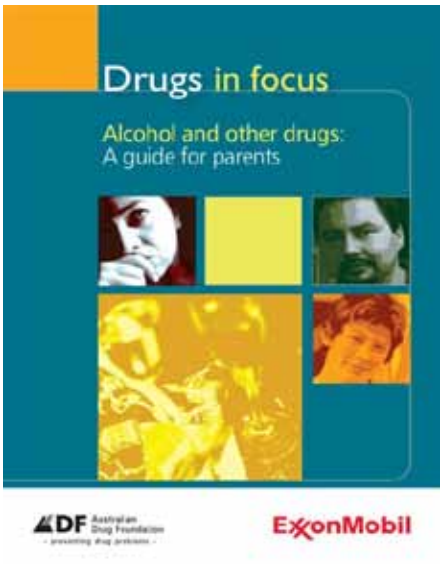
happy to promote his drug legalisation agenda, an agenda he outlined in his book Soros on Soros. His rhetoric was that Just Say No did not work, but the years before Soros began countering the campaign demonstrate that it worked very well indeed.

Tough on Drugs – reductions of 39%

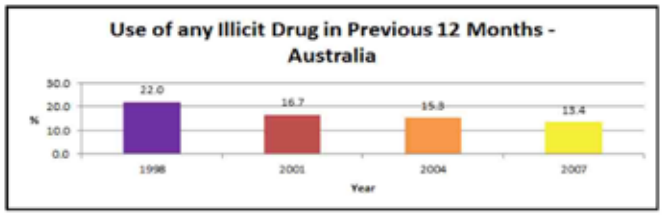
Australia's Federal Government introduced Tough on Drugs in 1998, with Drug Free Australia's previous President, Major Brian Watters as Prime Minister John Howard's chief advisor on drug issues. By 2007 the drug policy had reduced illicit drug use by 39% and had drawn the attention of the United Nations - a document that more fully explains the elements of Tough on Drugs.



Television advertising as previously mentioned was used to put Australia's drug problem, which was then the highest in the developed world, front and centre with the Australian public. Every household with children in Australia was posted a booklet on how parents should talk to their children about drugs.



This was considered a key element that reduced drug use by 39% - cannabis use was down 50%, heroin use by 75% and amphetamine use by 46%.



Since the Federal Government's prevention and recovery priorities as part of Tough on Drugs was discontinued in 2008, illicit drug use had increased 34% by 2022.

A proven pathway to less drug use

With Sweden, Iceland , US and previous Australian policies demonstrating a proven pathway to much lower drug use, Australia has the opportunity to pursue drug policies that work. These jurisdictions demonstrate the falsity of the notion that preventtion doesn't work.

Australians want less drugs, not more

The Australian Government's Australian Institute of Health and Welfare (AIHW) conducts the National Drug Strategy Household Survey every three years, commonly surveying close to 25,000 Australians each time. This enormous sample gives the surveys a great deal of accuracy and validity.

The last survey was in 2022/3, and Table 11.7 (at the top of the next page) from its statistical data indicates Australian approval (or lack thereof) of the regular use of various illicit drugs.

Table 11.7: Personal approval[40] of the regular use by an adult of selected drugs, people aged 14 and over, by gender, 2007 to 2022–2023 (per cent)

Proportion

	Males						Females						Persons
Drug	2007	2010	2013	2016	2019	2022–2023	2007	2010	2013	2016	2019	2022–2023	2022–2023
Alcohol	51.7	51.5	51.7	52.4	50.8	50.8	38.9	38.9	38.6	39.8	40.1	41.3	45.8
Tobacco	15.8	17.4	17.3	18.1	17.7	17.5	12.9	13.3	12.2	13.2	13.1	13.6	15.5
Kava	n.a.	5.9	6.8	7.6	8.7	11.5#	n.a.	2.6	2.9	3.3	4.1	5.9#	8.6#
Illicit drugs (excluding pharmaceuticals)													
Marijuana/cannabis	8.7	11.0	12.6	17.0	23.6	26.9#	4.6	5.3	7.0	11.2	15.6	19.9#	23.4#
Ecstasy	2.5	3.0	3.3	3.9	5.3	6.7#	1.5	1.7	1.6	1.8	2.3	3.0#	4.8#
Methamphetamine or amphetamine[41]	1.5	1.5	1.6	1.6	1.6	1.8	0.9	0.9	1.1	0.8	0.9	1.1	1.5
Cocaine/crack	1.8	2.2	1.9	2.0	3.0	3.4	1.0	1.2	1.3	1.4	1.7	2.2	2.8#
Hallucinogens	2.1	3.2	4.5	5.1	8.0	12.0#	1.2	1.6	1.7	2.4	3.2	7.1#	9.5#
Inhalants	1.0	1.3	0.9	0.9	1.2	1.4	0.7	0.8	1.0	1.0	0.8	0.9	1.2
Heroin	1.3	1.5	1.3	1.3	1.5	1.5	0.7	1.0	1.1	1.0	0.8	1.1	1.3
Ketamine	1.1	1.6	1.8	2.1	3.3	4.8#	0.8	0.9	1.1	1.1	1.5	2.2#	3.4#
GHB, GBL or 1,4-BD	0.8	1.3	1.3	1.5	1.8	2.3	0.7	0.8	1.0	0.8	0.8	0.8	1.5
Pharmaceuticals													
Prescription pain-killers/pain-relievers[41]	n.a.	13.4	13.0	13.2	13.3	13.7	n.a.	12.6	12.2	12.1	11.5	12.4	13.0
Tranquillisers, sleeping pills[41]	4.8	7.2	9.5	10.1	10.1	10.2	3.4	5.7	6.8	8.5	8.5	8.9	9.5
Steroids[41]	2.3	3.0	3.0	3.0	3.1	4.9#	0.9	1.4	1.5	1.8	1.6	2.2#	3.5#
Methadone or buprenorphine[41]	1.1	1.5	1.3	1.6	1.8	2.0	1.0	1.0	1.2	1.1	1.2	1.1	1.6

With 95-99% of all Australians not giving their approval to the use of heroin, cocaine, speed/ice and ecstasy, and 77% not giving their approval to the regular use of cannabis, **there is solid evidence that Australians want less drug use, not more**. This is evidence with which NSW Health needs to engage if the State policy is compassionate in its desire to reduce drug harms.

What emerges from the Australian statistics we have covered in this submission, Harm Reduction as a philosophy and a praxis that has delivered outcomes far inferior to a drug policy that prioritises prevention and recovery. For this reason Drug Free Australia recommends that NSW Health change its priorities and gives prevention/recovery a front seat in its drug policy mix, while re-engineering Harm Reduction programming to stream drug users towards recovery programs.

Going by an Australian drug policy history spanning 40 years, a downplaying of prevention and recovery, where there is little focus or funding for either, has seen

- ineffective government programs
- more drug use
- more drug-related harm
- increasing drug-related deaths

Australians will look to their health authorities to act not in the interests of deep-pocketed major political donors but rather in the interests of their constituencies.

In that context, Prevention and Recovery must be elevated to the highest priority..

Appendix A

Check for updates

Development and Guiding Principles of the Icelandic Model for Preventing Adolescent Substance Use

Alfgeir L. Kristjansson, PhD[1,2]
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Jon Sigfusson, MEd[2]
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Inga Dora Sigfusdottir, PhD[2]

Adolescent substance use—the consumption of alcohol, tobacco, and other harmful drugs—remains a persistent global problem and has presented ongoing challenges for public health authorities and society. In response to the high rates of adolescent substance use during the 1990s, Iceland has pioneered in the development of the Icelandic Model for Primary Prevention of Substance Use—a theory-based approach that has demonstrated effectiveness in reducing substance use in Iceland over the past 20 years. In an effort to document our approach and inform potentially replicable practice-based processes for implementation in other country settings, we outline in a two-part series of articles the background and theory, guiding principles of the approach, and the core steps used in the successful implementation of the model. In this article, we describe the background context, theoretical orientation, and development of the approach and briefly review published evaluation findings. In addition, we present the five guiding principles that underlie the Icelandic Prevention Model's approach to adolescent substance use prevention and discuss the accumulated evidence that supports effectiveness of the model. In a subsequent Part 2 article, we will identify and describe key processes and the 10 core steps of effective practice-based implementation of the model.

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Keywords: *adolescence; Icelandic model; implementation; practice-based evidence; prevention; substance use*

INTRODUCTION

Preventing alcohol, tobacco, and other harmful drug use among youth remains an ongoing challenge, especially in many advanced economies of the world. From a public health perspective, the most sensible approach to prevention is to avert or delay the onset of alcohol, tobacco, and other drug use as long as possible. Early drug use impairs psychosocial and neurocognitive development and increases youth vulnerability to later use of licit and illicit substances, academic failure, high-risk sexual behavior, and mental health problems (Atherton, Conger, Ferrer, & Robins, 2016; Windle & Zucker, 2010), and is strongly predictive of later dependence (Kendler, Myers, Damaj, & Chen, 2013; Moss, Chen,

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& Yi, 2014). Nonetheless, despite the need for effective primary prevention, most programs and approaches fail to show long-term impact and societal benefits (Hopfer et al., 2010; Kumpfer, Smith, & Summerhays, 2008).

Although there are examples of prevention approaches that have demonstrated success, such as the Strategic Prevention Framework developed by Substance Abuse and Mental Health Services Administration (Anderson-Carpenter, Watson-Thompson, Chaney, & Jones, 2016) and Communities That Care (Hawkins et al., 2008), a separate noteworthy success story in primary prevention of substance use comes from Iceland. This article is the first of a two-part series that describes the theory- and practice-based processes associated with the successful implementation of the Icelandic Model for Primary Prevention of Substance Use. Here we discuss the development of the Icelandic Prevention Model (IPM), present a brief theoretical overview, and summarize the accumulated evidence of effectiveness of the approach in reducing rates of adolescent substance use in Iceland. This is followed by an introduction to the five guiding principles underlying the model. We conclude by placing the model and the evidence in support of its effectiveness in context within the wider literature of the field.

MODEL DEVELOPMENT AND EVIDENCE OF EFFECTIVENESS

Context

In the 1990s, Iceland ranked comparatively high on adolescent alcohol, tobacco, and other harmful drug use as evidenced by results from the European School Project on Alcohol and Drugs (ESPAD)—a comparative study of 35 European countries conducted every 3 to 4 years (ESPAD Group, 2016). To illustrate, in 1999, the rate of ever smoking tobacco among 10th-grade youth in Iceland was 56% and 69% on average in Europe; the rate of drunkenness in the past 12 months was 56% in Iceland and 52% in Europe; and 15% had reported use of cannabis substances (hashish, marijuana) in Iceland, similar to other parts of Europe. For many years leading up to this point Iceland had been utilizing traditional methods of primary substance use prevention, namely, individual, school-based instructional and educational programs, with the aim of educating or leading youth away from initiating substance use (Palsdottir, 2003; Sigfusdottir, Thorlindsson, Kristjansson, Roe, & Allegrante, 2009). In response to the alarming rates of adolescent substance use in the mid-1990s and with sponsored funding from the government of Iceland and the Reykjavik City Council, a group of policy makers and administrative leaders, elected officials, and social scientists came together to explore new ideas for initiating a different, bottom-up collaborative approach to substance use prevention that has since become known as the Icelandic Prevention Model (Sigfusdottir et al., 2009; Sigfusdottir, Kristjansson, Gudmundsdottir, & Allegrante, 2011).

Model Development

Since its formulation, the IPM has been grounded in classic theories of social deviance that were developed in sociology and criminology (Akers, 1977; Hirchi, 1969; Merton, 1938), rather than based in traditional health behavior change theories (Glanz, Rimer, & Viswanath, 2015). The mutual viewpoint of these deviance theories is that most individuals are capable of deviant acts but that only under certain environmental and social circumstances will those acts become common patterns of behaviors among dominant groups of adolescents. Major reasons for such behavioral patterns thus include (a) lack of environmental sanctions by the social environment (e.g., from parents and other adults), (b) low individual and/or community investment in traditional and positive values (e.g., high educational aspirations), and (c) lack of opportunities for participation in positive and prosocial development (e.g., organized recreational and extracurricular activities such as sports, music, drama, after school clubs, etc.). Thus, from this theoretical perspective, children are viewed as social products and not as rational individual actors, and hence alcohol, tobacco, and other drug use is viewed as attributes of the social environment (Sigfusdottir et al., 2009) and engrained in both risk and protective factors that comprise key determinants of the ongoing cycle of substance use.

Echoed by this theoretical view, the goal of the approach from the outset was to "mobilize society as a whole in the struggle against drugs" (Palsdottir, 2003), with emphasis on community engagement and collaboration leading to long-standing and gradual environmental and social change rather than short-term solutions. Rooted in research evidence from the social and behavioral sciences, the preventive cornerstone of the approach was to strengthen protective factors and mitigate risk factors at the local community level within each of the domains of parents and family, the peer group, the school environment, and leisure time outside of school (Nash, McQueen, & Bray, 2005; Scholte, Poelen, Willemsen, Boomsma, & Engels, 2008; Watkins, Howard-Barr, Moore, & Werch, 2006), all of which are potential domains of ongoing practice-based assessment and intervention (see Figure 1). The 10 core

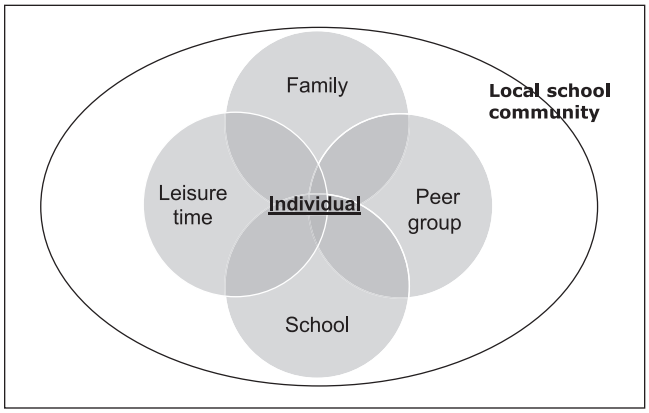


FIGURE 1 Domains of Community Risk and Protective Factors in the Icelandic Prevention Model

steps to this effective intervention process are outlined in the related second article within this issue of *Health Promotion Practice*.

Evaluation and Evidence of Effectiveness

Since the original development of the model, Iceland has led the decline in substance use in all of Europe. In 2015, the rate of ever smoking tobacco was 46% among 10th-grade adolescents in Europe but had plunged to 16% in Iceland; average rates of current alcohol use were 48% in Europe but 9% in Iceland; and average rates of lifetime use of cannabis substances remained at 16% in Europe, similar to 1999, but declined to 5% in Iceland (see Figure 2 for standard trend measures from the Youth in Iceland studies). In all instances, the 2015 rates in Iceland represented either the lowest or the second lowest of all 35 countries that participated in the ESPAD study that year (ESPAD Group, 2016). Corresponding to these changes in substance use, Iceland had also witnessed large reductions in risk factors and strengthening of protective factors. For example, 10th-grade students reporting parents knowing with whom they spend time in the evenings increased from ~50% in 2000 to just over 74% in 2016. Even more dramatic, while 80% of 10th-grade students reported having been "outside after midnight" once or more during the 7 days prior to the annual survey in 2000, this ratio had declined to approximately 31% in 2016. During the same time, participation in organized sports with a club or team four times per week or more often had increased from 26% in 2000 to approximately 37% in 2016 (Kristjansson et al., 2016). Using a quasi-experimental, group-based design, we conducted an evaluation to assess central elements of the IPM (Kristjansson, James, Allegrante, Sigfusdottir, & Helgason, 2010). Municipalities that had consistently been a part of the model since 1997 formed the intervention group and were compared to those that had consistently been outside of the formal model. It should be noted that given the geographical isolation and small population of the country, potentially contaminating spillover effects from the model to outside areas could be expected. However, despite these challenges, the evaluation demonstrated a significand difference in group trends over time in smoking and alcohol use, parental monitoring, party lifestyle, and participation in organized sports, with the treatment group being favored in all instances.

Since the mid-1990s, much has changed in the adolescent environment in Iceland that has been influenced by widespread implementation of the model. Some of those changes are holistic and onetime alterations, while several notable others are ongoing and continuous. First, municipalities and schools that include over 80% of the country's population now routinely utilize annually updated survey data to monitor trends and potential changes in substance use and risk and protective factors among youth and use this information to organize responses and set strategies for the year ahead. Second, most municipalities and many schools now employ designated personnel with dedicated time to engage in primary prevention activities. In addition, government-funded community nongovernmental organizations have been set up to strengthen and improve the collaborative aspect of parenting at the local school-community level. Finally, municipalities have as a matter of policy increased funding dramatically for recreational and extracurricular activities for children and adolescents, making such activities available to all through a user-friendly voucher system.

FIVE GUIDING PRINCIPLES

The IPM is built on a foundation of five guiding principles (see Table 1). Each principle can be thought of as a unique dimension of an overall approach that provides direction for how each step in the community intervention process ideally should be implemented (see Kristjansson et al., 2019). Although different steps in the process may emphasize a given guiding principle more or less heavily, every step of the model should include each of these principles. When choosing among competing strategies, the guiding principles can be consulted as a means of identifying the strategy most in keeping with the intended design of the IPM and local needs. Below, is a brief summary of each of these principles and associated dimensions.

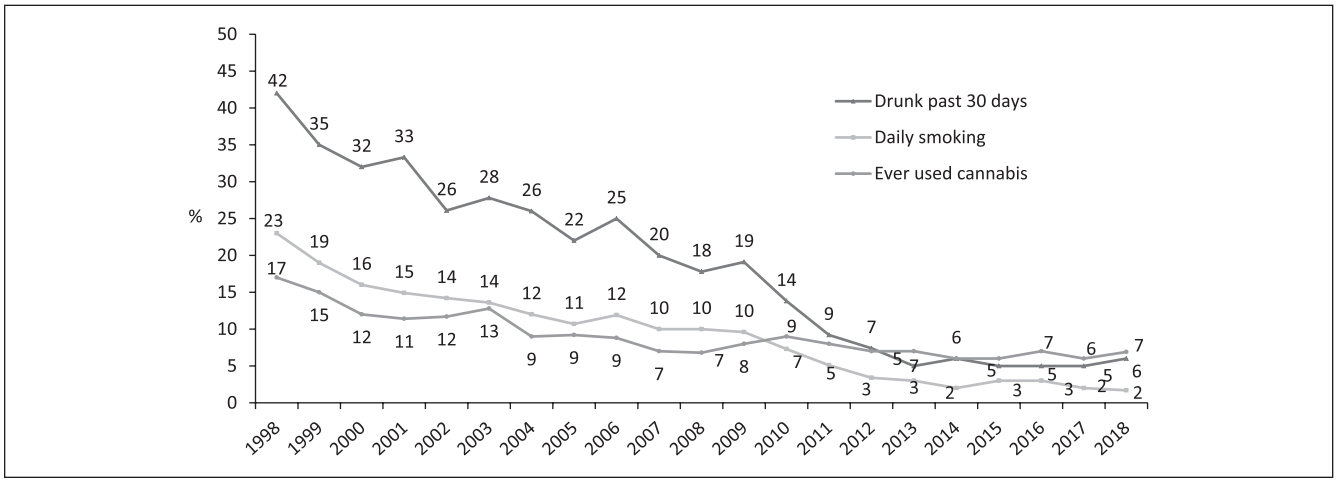


FIGURE 2 Annual Percentage of Self-Reported Substance Use Among Icelandic Adolescents, 1998-2018
SOURCE: Kristjansson et al. (2016).

TABLE 1
The Five Guiding Principles of the Icelandic Prevention Model

Guiding Principle 1	Apply a primary prevention approach that is designed to enhance the social environment.
Guiding Principle 2	Emphasize community action and embrace public schools as the natural hub of neighborhood/area efforts to support child and adolescent health, learning, and life success.
Guiding Principle 3	Engage and empower community members to make practical decisions using local, high-quality, accessible data and diagnostics.
Guiding Principle 4	Integrate researchers, policy makers, practitioners, and community members into a unified team dedicated to solving complex, real-world problems.
Guiding Principle 5	Match the scope of the solution to the scope of the problem, including emphasizing long-term intervention and efforts to marshal adequate community resources.

Guiding Principle 1: Apply a Primary Prevention Approach That Is Designed to Enhance the Social Environment

The model focuses on preventing the initiation of substance use by altering the social environment in a manner that reduces the likelihood that young people will initiate substance use. This approach therefore addresses the underlying causes of substance use initiation. By working to increase social and environmental protective factors associated with preventing or delaying substance use and decreasing corresponding risk factors, the model prevents substance use by intervening on society itself and across a broad spectrum of opportunities for community intervention. This "society is the patient" approach (Myers, 2008) prioritizes thoughtfully and intentionally altering the social, organizational, and cultural characteristics of communities as the primary means of inoculating young people against substance use. Within this principle, accessing and/or hiring appropriate personnel to guide local team-building and bridging the use of research evidence to practical implementation will be central.

Guiding Principle 2: Emphasize Community Action and Embrace Public Schools as the Natural Hub of Neighborhood/Area Efforts to Support Child and Adolescent Health, Learning, and Life Success

The model's primary unit of intervention is the neighborhood, which is defined as the service area assigned to a local school. The model uses an ecological approach that addresses family, school, peer, and community social influences and other opportunities within each neighborhood. Although schools are not primarily responsible for strengthening the neighborhoods and areas they serve, they do represent an essential hub for local activities designed to support the

health, well-being, and success of children and adolescents. As a result, strengthening connections between families, schools, and the community-at-large, and unifying those groups into a cohesive team devoted to preventing substance use, represents a core strategy of the IPM. Securing the collaboration and commitment of schools for the collection of data to routinely monitor trends in both substance use and risk and protective factors is therefore essential.

Guiding Principle 3: Engage and Empower Community Members to Make Practical Decisions Using Local, High-Quality, Accessible Data and Diagnostics

Local community members make all model-driven decisions based on hard data and neighborhood and school-specific diagnostics. The model thus relies on local data to (a) capture, focus, and sustain community attention on local factors essential to preventing substance use (b) guide the selection of strategies and the development of community capacity necessary to address the complex problem of substance use.

To accomplish this, the model uses data that are local, high-quality, and made accessible through quick and efficient processing and dissemination. Local data amplify community interest in what is happening with the young people living in local areas and neighborhoods, as well as motivating community action to address local problems. High-quality data strengthen opportunities to accurately describe, diagnose, and inform community decision making. Accessible and current data promote meaningful participation from the whole community by presenting information in a clear manner that is easily understood by most community members. Using local, high-quality, and accessible data allows a local prevention team to accurately describe how community characteristics relate to substance use in each specific neighborhood or school, to identify possible priorities for intervention, and to support well-informed community members as they use hard data to choose strategies most likely to be successful in their individual communities. Collaborating with community-based researchers and supporting them to collect, process, and disseminate regular data is essential to this principle.

Guiding Principle 4: Integrate Researchers, Policy Makers, Practitioners, and Community Members Into a Unified Team Dedicated to Solving Complex, Real-World Problems

In many public and community health interventions, the connections between researchers, policy makers, practitioners, and community members are more theoretical than functional and practical. Although they may share the same goal, each group tends to function in isolation from the others and at varying proximities from the problem itself. The IPM takes a team-science-to-practice approach to prevention that integrates researchers, policy makers, practitioners, and community members into a team that works to solve real-world problems in specific areas or neighborhoods over long periods of time. Thus, each group maintains close proximity to each other and the problem itself. While working together to implement each of the 10 Core Steps of the Icelandic Prevention Model (see Kristjansson et al., 2019), each group not only offers unique skills and experiences necessary for solving local problems related to substance use but also does so in a manner that seeks to both influence and be influenced by other team members. For example, using this approach, researchers are open to ideas from policy makers, practitioners, and community members and often rely on their practice-based insights to guide future directions in data collection and interpretation of existing data. Conversely, policy makers, practitioners, and community members come to rely on researchers when collecting data, making data-driven decisions, and evaluating community progress. By establishing this kind of functional team dynamic, the model aligns the expertise and efforts of researchers, policy makers, practitioners, and community members to maximize the practical, real-world impact of their collective capacity. Clarifying and maintaining the importance of collaboration is the crux of this principle.

Guiding Principle 5: Match the Scope of the Solution to the Scope of the Problem, Including Emphasizing Long-Term Intervention and Efforts to Marshal Adequate Community Resources

The model recognizes that the social conditions that promote substance use among young people emerge from multiple, complex sources over time. For example, previously established social norms related to substance use; community economic conditions; the prevalence of depression, anxiety, and addiction among adults; and a lack of interesting and accessible structured leisure time opportunities may all contribute to a rise in the rates of substance use and abuse among adolescents. The rise of any one of these contributing factors is complex and usually occurs over long periods of time. Therefore, solutions designed to counteract, mitigate, or eliminate these social conditions must account for the scope and magnitude of those initial problems. Problems that take 10 years to develop are seldom solved in 10 weeks or

even 10 months. More often, decade-long social problems may take years to address and require long-term vision and planning, sustained attention and commitment, adherence to an iterative and repetitive approach, and long-cycle or permanently committed financial resources. Since the model is based on an ongoing effort to alter society in a manner that protects young people from substance abuse, it must also prioritize creating the community capacity and long-term commitments necessary to achieve this goal. Understanding and appreciating that primary prevention as seen through the lens of the IPM is a long-term strategy will be necessary to live up to this guiding principle.

DISCUSSION

The IPM in many ways mirrors what Livingood et al. (2011) have called for and labelled as an applied "toolkit approach" to health promotion. Rather than relying on universal and prescriptive interventions, the toolkit approach assumes that communities vary greatly in strengths, opportunities, and resources. For health promotion practice this means that although the influence of specific risk and protective factors operates similarly across individuals (Hemphill et al., 2011), their prevalence and significance differ at the school-community level (Hawkins, Van Horn, & Arthur, 2004). This is particularly important for primary substance use prevention because it underscores the appropriateness of community-wide diagnosis of risk and protective factors, and the local tailoring of intervention activities (Livingood et al., 2011).

Instead of attributing the risks of substance use initiation among children and adolescents to individual choices, the IPM is designed to maximize the odds of healthy individual choices as default and therefore for greater population impact than typically achieved through efforts limited to individual-level programs. This aligns with the premises of the Centers for Disease Control and Prevention Health Impact Pyramid (Frieden, 2010)—the five-layer pyramid that represents a spectrum of changes from population-level socioeconomic factors at the base of the pyramid, to the individual-level counseling and education at the apex of the pyramid—and assumes an inverse relationship between the increased individual effort needed at the top and the potential population impact at the bottom. Above changes in socioeconomic factors, the fourth layer in the pyramid concerns itself with "Changing the Context to Make Individuals' Default Choices Healthy." In the context of the Health Impact Pyramid, this is precisely the position and focus of the IPM. However, changing community norms and culture takes time, and time is commonly a scarce resource to planners, funders, and elected officials who seek immediate answers or solutions to community problems. Thus, mutual agreement and understanding among stakeholders that the IPM is a long-term approach is essential for success.

In reviewing the five guiding principles of the IPM, it becomes apparent that individual elements of the model are not new. The key difference between the IPM and other prevention approaches concerns its processes and reliance on collaboration between representatives from sectors that usually do not interact or engage much with one another: researchers, policy makers, practitioners, and community stakeholders. At the local level, everyone is needed at the table to work in dialogue under the realization that each of these entities represents an important function in the system, and therefore each is also limited in their scope and strengths. Thus, a central theme in the approach is community engagement and collaboration to foster an environment that is resistant to substance use, assuming that the risk of substance use initiation among children and adolescents grows out the of the social environment (Akers, Krohn, Lanza-Kaduce, & Radocevich, 1979; Hirchi, 1969; Merton, 1938; Sigfusdottir et al., 2009). Thus, instead of facilitating behavior change at the individual level through educational and/or instructional programs, as is more common in traditional prevention work, the IPM assumes that changing the environment will generate less risk-prone individuals in the long term. It is therefore not a top-down program but a bottom-up community-building collaborative approach that is organized for long-term action, change, and maintenance of change.

In conclusion, the IPM has been in development and practice-based refinement for 20 years (Palsdottir, 2003; Sigfusdottir et al., 2009) and has demonstrated strong evidence of effectiveness in reducing substance use among Icelandic adolescents. Since the initiation of the *Youth in Europe* project in 2006 (Kristjansson, Sigfusson, Sigfusdottir, & Allegrante, 2013; Sigfusdottir, Kristjansson, & Agnew, 2012), the approach has been disseminated and scaled—in part or in whole—in several other countries, cities, and municipalities (Kristjansson et al., 2013; Kristjansson et al., 2017). During this time, we have learned which challenges most commonly impede full implementation and subsequent results. These challenges include inadequate organization and poor coalition building at the local level, limited funding and personnel with protected time to devote to primary prevention, low levels of political and administrative support and/or distrust in research, poor data collection preparation with schools and/or confusion about individual roles, low participation in community meetings and failure to garner wide community support and engagement, extended time between data collection and

report dissemination, confusion about data ownership and rights to distribution, limited interest in community engagement beyond informational meetings, lack of organizational and community-based strategies to identify and work on selected priorities, limited availability for structured leisure time activities and low commitment to improve/add opportunities, and insufficient time allowed to facilitate long-term changes. Part 2 in this series will examine these challenges and the respective steps we have found necessary to take in overcoming them when implementing primary prevention of adolescent substance use.

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REFERENCES

Akers, R. L. (1977). *Deviant behavior: A social learning approach* (2 ed.). Belmont, CA: Wadsworth.

Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radocevich, M. (1979). Social learning and deviant behavior: A specific test of a general theory. *American Sociological Review*, *44*, 636-655.

Anderson-Carpenter, K. D., Watson-Thompson, J., Chaney, L., & Jones, M. (2016). Reducing binge drinking in adolescents through implementation of the Strategic Prevention Framework. *American Journal of Community Psychology*, *57*(1-2), 36-46.

Atherton, O. E., Conger, R. D., Ferrer, E., & Robins, R. W. (2016). Risk and protective factors for early substance use initiation: A longitudinal study of Mexican-origin youth. *Journal of Research on Adolescence*, *26*, 864-879. doi:10.1111/jora.12235

European School Project on Alcohol and Drugs Group. (2016). ESPAD report 2015: *Results from the European School Survey Project on Alcohol and Other Drugs*. Retrieved from Luxembourg Publications Office of the European Union website: http://espad.org/sites/espad.org/files/TD0116475ENN.pdf

Frieden, T. R. (2010). A framework for public health action: The Health Impact Pyramid. *American Journal of Public Health*, *100*, 590-595. doi:10.2105/ajph.2009.185652

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). *Health behavior: Theory, research and practice* (5th ed.). San Francisco, CA: Jossey-Bass.

Hawkins, J. D., Catalano, R. F., Arthur, M. W., Egan, E., Brown, E. C., Abbott, R. D., & Murray, D. M. (2008). Testing communities that care: The rationale, design and behavioral baseline equivalence of the Community Youth Development Study. *Prevention Science*, *9*, 178-190.

Hawkins, J. D., Van Horn, M. L., & Arthur, M. W. (2004). Community variation in risk and protective factors and substance use outcomes. *Prevention Science*, *5*, 213-220. doi:10.1023/b:prev.0000045355.53137.45

Hemphill, S. A., Heerde, J. A., Herrenkohl, T. I., Patton, G. C., Toumbourou, J. W., & Catalano, R. F. (2011). Risk and protective factors for adolescent substance use in Washington State, the United States and Victoria, Australia: A longitudinal study. *Journal of Adolescent Health*, *49*, 312-320. doi:10.1016/j.jadohealth.2010.12.017

Hirchi, T. (1969). *Causes of delinquency*. Los Angeles: University of California Press.

Hopfer, S., Davis, D., Kam, J. A., Shin, Y., Elek, E., & Hecht, M. L. (2010). A review of elementary school-based substance use prevention programs: Identifying program attributes. *Journal of Drug Education*, *40*, 11-36. doi:10.2190/DE.40.1.b

Kendler, K. S., Myers, J., Damaj, M. I., & Chen, X. G. (2013). Early smoking onset and risk for subsequent nicotine dependence: A monozygotic co-twin control study. *American Journal of Psychiatry*, *170*, 408-413. doi:10.1176/appi.ajp.2012.12030321

Kristjansson, A. L., James, J. E., Allegrante, J. P., Sigfusdottir, I. D., & Helgason, A. R. (2010). Adolescent substance use, parental monitoring, and leisure-time activities: 12-year outcomes of primary prevention in Iceland. *Preventive Medicine*, *51*, 168-171. doi:10.1016/j.ypmed.2010.05.001

Kristjansson, A. L., Mann, M. J., Sigfusson, J., Sarbu, E. A., Grubliauskiene, J., Daily, S. M., & Sigfusdottir, I. D. (2017). Prevalence of e-cigarette use among adolescents in 13 Eastern European towns and cities. *Public Health*, *147*, 66-68. doi:10.1016/j.puhe.2017.02.005

Kristjansson, A. L., Mann, M. J., Sigfusson, J., Thorisdottir, I. E., Allegrante, J. E., & Sigfusdottir, I. D. (2019). Implementing the Icelandic model for preventing adolescent substance use. *Health Promotion Practice*. Advance online publication. doi:10.1177/1524839919849033

Kristjansson, A. L., Sigfusdottir, I. D., Thorlindsson, T., Mann, M. J., Sigfusson, J., & Allegrante, J. P. (2016). Population trends in smoking, alcohol use and primary prevention variables among adolescents in Iceland, 1997-2014. *Addiction*, *111*, 645-652. doi:10.1111/add.13248

Kristjansson, A. L., Sigfusson, J., Sigfusdottir, I. D., & Allegrante, J. P. (2013). Data collection procedures for school-based surveys among adolescents: The Youth in Europe Study. *Journal of School Health*, *83*, 662-667. doi:10.1111/josh.12079

Kumpfer, K. L., Smith, P., & Summerhays, J. F. (2008). A wakeup call to the prevention field: Are prevention programs for substance use effective for girls? *Substance Use & Misuse*, *43*, 978-1001. doi:10.1080/10826080801914261

Livingood, W. C., Allegrante, J. P., Airhihenbuwa, C. O., Clark, N. M., Windsor, R. C., Zimmerman, M. A., & Green, L. W. (2011). Applied social and behavioral science to address complex health problems. *American Journal of Preventive Medicine*, *41*, 525-531.

Merton, R. (1938). Social structure and anomie. *American Sociological Review*, *3*, 672-682.

Moss, H. B., Chen, C. M., & Yi, H.-Y. (2014). Early adolescent patterns of alcohol, cigarettes, and marijuana polysubstance use and young adult substance use outcomes in a nationally representative sample. *Drug and Alcohol Dependence*, *136*, 51-62.

Myers, D. J. (2008). Epidemiologists, our patient is society. *New Solutions*, *18*, 107-109.

Nash, S. G., McQueen, A., & Bray, J. H. (2005). Pathways to adolescent alcohol use: Family environment, peer influence, and parental expectations. *Journal of Adolescent Health*, *37*, 19-28.

Palsdottir, D. (2003). *Drug-free Iceland: 2002 final report*. Retrieved from https://www.landlaeknir.is/servlet/file/store93/item10661/IAE_final2003.pdf

Scholte, R. H. J., Poelen, E. A. P., Willemsen, G., Boomsma, D. I., & Engels, R. C. M. E. (2008). Relative risk of adolescent and young adult alcohol use: The role of drinking fathers, mothers, siblings, and friends. *Addictive Behaviors*, *33*, 1-14.

Sigfusdottir, I. D., Kristjansson, A. L., & Agnew, R. (2012). A comparative analysis of general strain theory. *Journal of Criminal Justice*, *40*, 117-127. doi:10.1016/j.jcrimjus.2012.01.001

Sigfusdottir, I. D., Kristjansson, A. L., Gudmundsdottir, M. L., & Allegrante, J. P. (2011). Substance use prevention through school and community-based health promotion: a transdisciplinary approach from Iceland. *Global Health Promotion*, *18*, 23-26. doi:10.1177/1757975911412403

Sigfusdottir, I. D., Thorlindsson, T., Kristjansson, A. L., Roe, K. M., & Allegrante, J. P. (2009). Substance use prevention for adolescents: The Icelandic model. *Health Promotion International*, *24*, 16-25. doi:10.1093/heapro/dan038

Watkins, J. A., Howard-Barr, E. M., Moore, M. J., & Werch, C. C. (2006). The mediating role of adolescent self-efficacy in the relationship between parental practices and adolescent alcohol use. *Journal of Adolescent Health*, *38*, 448-450.

Windle, M., & Zucker, R. A. (2010). Reducing underage and young adult drinking: How to address critical drinking problems during this developmental period. *Alcohol Research & Health*, *33*, 29-44.