NEW ZEALAND
NATIONAL DRUG INTELLIGENCE BUREAU
JOINT OPERATION OF POLICE, CUSTOMS & HEALTH DEPARTMENTS

Police National Headquarters, 180 Molesworth Street, Wellington, New Zealand
P.O. Box 3017, Phone: 64 4 462 0131, Fax: 64 4 498 7409

'New Cannabis':

The Cornerstone of Illicit Drug Harm in New Zealand

2007 Strategic Assessment

Les Maxwell
Strategic Drug Analyst
National Drug Intelligence Bureau (NDIB)
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1.0 INTRODUCTION

Inconsistent policy sends confusing and mixed messages…	Consistent policy sends clear messages…
In January 2004, the United Kingdom reclassified cannabis from a Class B to a Class C drug. During the 2005 general election, Prime Minister Tony Blair announced that *"…the reclassification of cannabis (from Class B to Class C in 2004) would be reviewed in light of new scientific research…"* In January 2006, Charles Clarke the Home Secretary said that "*…on the basis of advice…a decision has been made not to reclassify cannabis".* In July 2007, Prime Minister Gordon Brown announced *"…the Home Secretary will consult on whether it is now right that cannabis should be moved from Class C to Class B".*	The current Swedish drug policy, with its primary goal of a drug free society, was instituted in the early 1980's because of what was considered to be an increasing social problem. One of the aims of the policy is to make it clear that drugs are not tolerated in society. *"We do not accept the integration of drugs in society, and our aim is a society in which drug abuse remains a socially unacceptable form of behavior, a society in which drug abuse remains a marginal phenomenon. A drug free society is a vision expressing optimism and a positive view of humanity; the onslaught of drugs can be restrained, and drug users can be rehabilitated".* Sweden's drug abuse rates are only one third of the European average[1].

Cannabis is the most controversial and widely debated illicit drug in the world. Cannabis evokes emotive competing commentary from a globally connected pro cannabis lobby who conduct very focused and articulate campaigns to overturn drug laws and policies. In the last forty years there has been a plethora of assessments and studies that have espoused contrary views on the harms posed by cannabis use which has led to confusion amongst the general population.

A number of pre-eminent international agencies have highlighted the increasing threat posed by high potency or 're-engineered' cannabis ('new cannabis'), particularly from a health perspective. It is no surprise 'new cannabis' has been a steadily increasing feature of the New Zealand cannabis environment since the late 1990's.

[1] Executive Director of the United Nations Office of Drugs and Crime.

The New Zealand Government, at Ministerial level, recently formally acknowledged New Zealand had *a "drug problem".* The prevalence of cannabis in the Oceania Region, particularly New Zealand, as illustrated in this assessment are amongst the highest in the world and are largely of our own making. New Zealand society appears to have been comfortable with high prevalence levels of cannabis within our communities for at least the last fifteen years. Whilst New Zealand has not totally ignored cannabis issues, the emergence of synthetic drugs since the late 1990's has been a key distraction.

This assessment provides commentary on the successful drug control frameworks operating in other countries that have achieved significant reductions in other illicit drug abuse in recent years through recognising and targeting cannabis as the major contributing first drug in the chain towards other drug abuse.

Although New Zealand has been affected to some extent by the general trend of global trivialisation of cannabis, further action should be taken to reduce both the supply and demand for cannabis. The challenge is for government to review and where appropriate strengthen measures to reduce cannabis prevalence over the long term to contribute to reducing the prevalence of other illicit drugs.

"Young people need their leaders to take action together"[2].

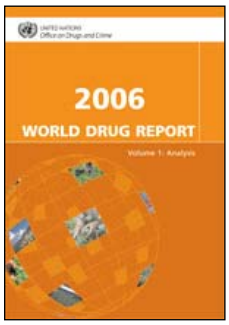
[2] Former United Nations Director General, Mr Kofi Annan during his opening address to the 20th Special Session of the United Nations General Assembly, 1998 – Countering the World Drug Problem.

2.0 THE GLOBAL CANNABIS ENVIRONMENT

2.1 "CANNABIS: WHY WE SHOULD CARE"

Mr Antonio Maria Costa

In his opening statement to the 50th Session of the Commission on Narcotic Drugs (CND)[3] in Vienna on 12 March 2007 the Executive Director of the United Nations of Drugs and Crime (UNODC), Mr Antonio Maria Costa, amongst a wide range of topics, commented that… *"cannabis was a global problem, with a few specific exceptions. Cannabis is cultivated all over the world, indoor and out. Cannabis supply is influenced by bio technologies, some indoors that increase its potency and its yields by many multiples aggravating the impact on public health".* While noting…*"the high levels of cultivation in almost all regions and high levels of consumption there were exceptions: in countries where young people were aware of the risks, cannabis use is either low (Japan and Northern Europe) or decreasing (Australia). In other countries (United Kingdom) law enforcement had lowered consumption".*



Mr Costa concluded his commentary on cannabis by stating…*"cannabis remains a drug crying out for coherent policy"* which is clearly a reference to the inconsistent interpretation of the Single Convention on Narcotic Drugs, 1961 by some countries.

The annual United Nations Office of Drugs and Crime (UNODC) World Drug Reports present "the most salient trends in production, trafficking and use of drugs". The aim of the World Drug Report is "to contribute to annual assessments by presenting supply (production and trafficking) and demand statistics and analysis on the evolution of the global illicit drug problem". The reports are based on data provided by the Annual Results Questionnaire (ARQ) sent by governments to the UNODC but is supplemented by other sources of information.

The 2006 World Drug Report highlights increasing UN concern surrounding the undermining of the Single Convention on Narcotic Drugs, 1961 by many western countries in terms of cannabis control.

2.1.1 Global Prevalence of Cannabis

The 2006 World Drug Report includes a summary of a 'Market Study / Survey' on cannabis within a feature chapter titled **'Cannabis: Why We Should Care'** which focuses on a wide range of global cannabis related issues including 'global seizures', 'regional annual prevalence rates', 'Oceania: The Worlds Highest Use Levels', and the 'Re-engineering of Cannabis'. **'Cannabis: Why We Should Care'** encapsulates the heart of modern cannabis issues.

[3] See Appendix III Commission on Narcotic Drugs (CND): Resolutions – Cannabis in which recent CND cannabis related resolutions are summarised.

The full 'Market Study / Survey' is scheduled for publication in early 2008 within the UNODC 'Bulletin on Narcotics'. In addition, a 'Global Survey' of cannabis has been signaled to member countries and is likely to commence in 2008. When completed, the 'Global Survey' will include, for example, a more authoritative global estimate of cannabis cultivation.

The opening preface of the 2006 World Drug Report highlights:

"Cannabis…is the world's most abused drug. Global oversight of supply is impractical as it is a weed that grows under the most varied conditions, at many different latitudes and in many countries. National policies on cannabis vary and sometimes change from one year to the next. With supply virtually unlimited and demand subject to the vagaries of Government policy, traffickers have invested heavily in increasing the potency, and therefore the market attractiveness. The result has been devastating: today, the characteristics of cannabis are no longer that different from those of other plant drugs such as cocaine and heroin."

"With cannabis related health damage increasing, it is fundamentally wrong for countries to make cannabis control dependent on which party is in Government. Policy swings or reversals leave young people confused as to just how dangerous cannabis is. The cannabis pandemic, like other challenges to public health, requires consensus and a stable and consistent engagement across society at large so countries can take appropriate and long term remedial action".

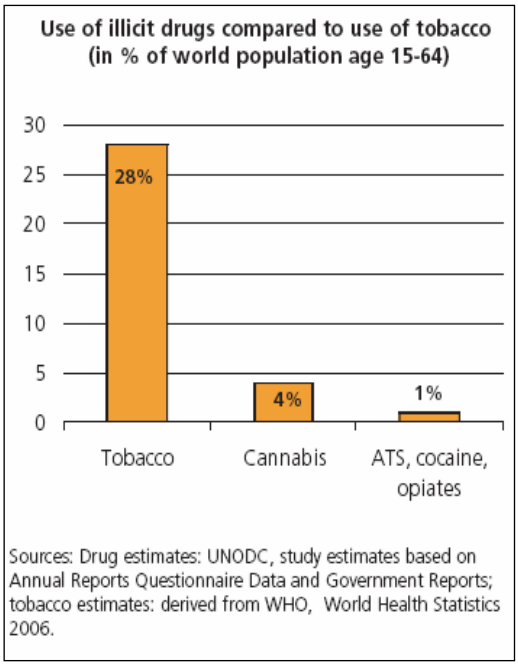


Figure 1: Use of Illicit Drugs Compared to Tobacco

To place estimated global cannabis use into context, Figure 1 illustrates that 'about 28% of the world's adult population is estimated to use tobacco, which exceeds, by far, the number of people using illicit drugs (5%); of which 4% is for cannabis and 1% for amphetamines[4], cocaine and opiates combined'. The total number of estimated drug users in the world stands at '200 million people' (5%) of which cannabis remains the most widely abused with '162 million people' (4%), followed by amphetamines '35 million people', opiate abusers '16 million people' and cocaine abusers '13 million people' (1%).

An analysis of the data suggests that the strongest increase over the last decade was for cannabis use and amphetamines use. All available indicators suggest that the expansion of cannabis use over the last ten years (1994 to 2004) was stronger than increases for opiates or cocaine and similar to the one observed for amphetamines.

[4] Includes all amphetamine type stimulants (ATS).

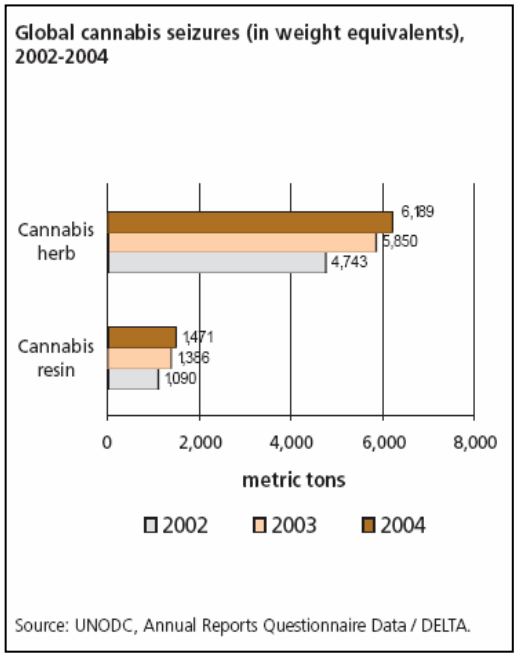


Figure 2: Global Cannabis Seizures 2002 to 2004 by Metric Tons

Figure 2 depicts global cannabis herb / leaf[5] and cannabis resin seizures which in 2004, for the first time, surpassed 6,000 metric tons. This represents a 6% increase for both cannabis herb / leaf and cannabis resin. Most cannabis herb / leaf seizures were reported from Mexico, followed by the United States, South Africa, Nigeria and Morocco. Most seizures of cannabis resin were made by Spain, followed by Pakistan, France, Morocco and Iran.

Figure 3 below depicts global drug seizures made of all other illicit drugs combined in metric tons. The total global seizures (in metric tons) of all other illicit drugs combined do not exceed the total for cannabis herb / leaf.

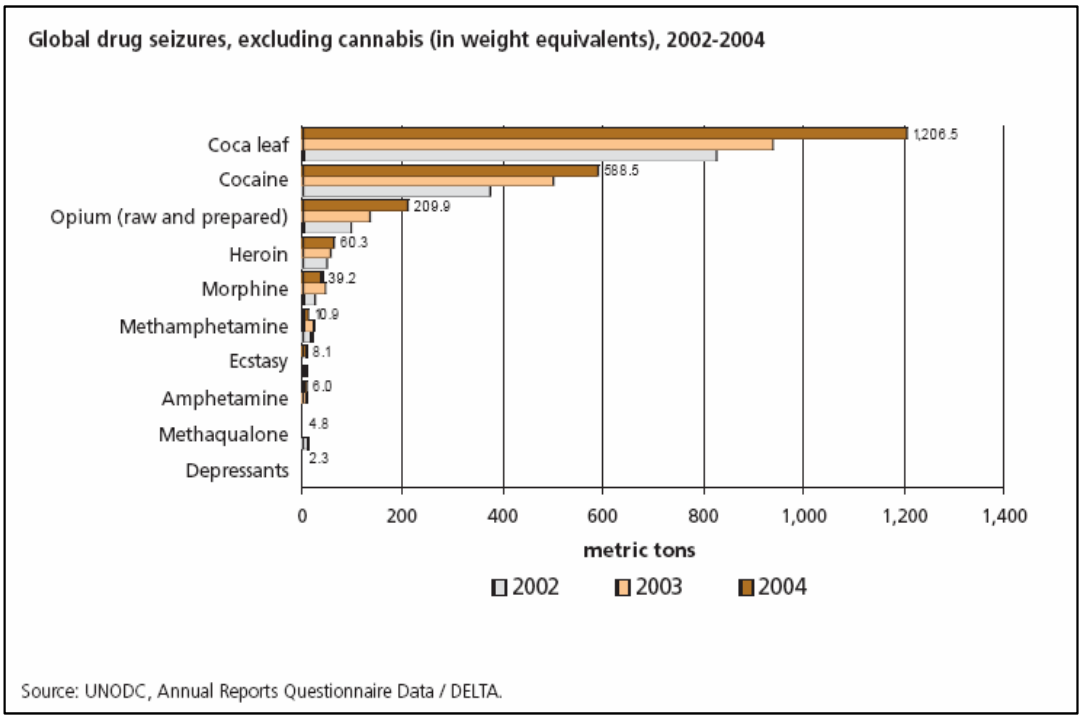


Figure 3: Global Illicit Drug Seizures 2002 to 2004 by Metric Tons

Cannabis is produced in 176 countries around the world. There is no region in the world where cannabis is not the dominant illicit drug; cannabis is an international problem. In a summary of regions Oceania, (depicted in Figure 4 below) is identified as having 'the world's highest annual use levels'. The prevalence levels in Oceania are more than 30% higher than North America.

[5] In the New Zealand context cannabis herb is referred to as cannabis leaf.

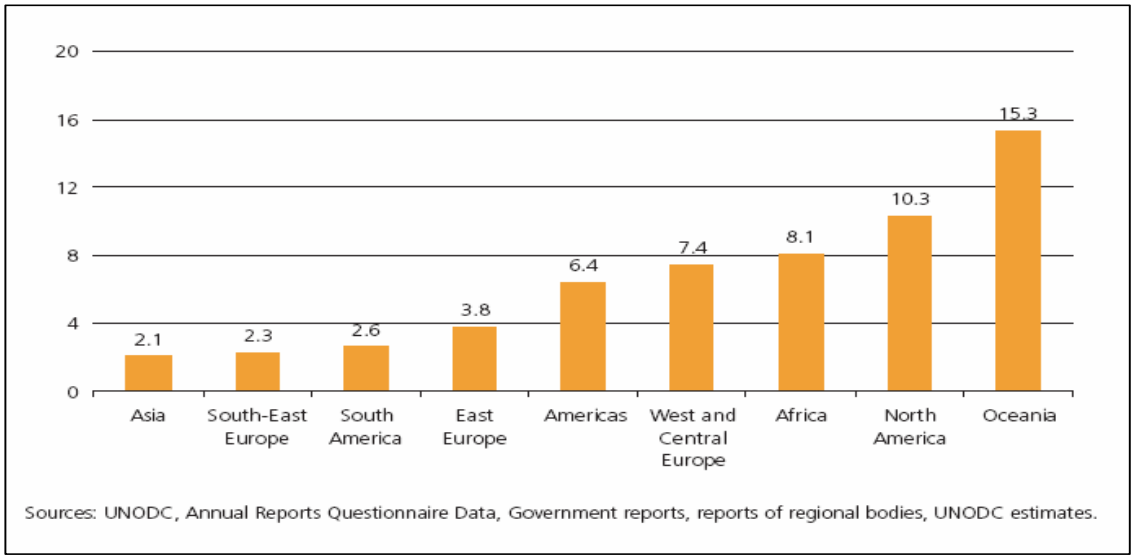


Figure 4: Regional Annual Prevalence Rates

The UNODC notes that it is difficult to estimate the size of the global market as very few Governments[6] can give an accurate estimate of the area of cultivation in their own countries, and the amount of drug product this would yield is subject to a range of variables, including the type of cannabis desired and the number of crops possible in the year. However, information from the top six producer countries, which together are responsible for 75% of global seizures, a rough estimate of 231,000 hectares can be derived, producing some 30,000 metric tons of herbal cannabis and 7,000 metric tons of cannabis resin. The ensuing deduction is that approximately 17% is seized by authorities.

Developed countries, New Zealand included, 'cannot say with any precision how much of the cannabis consumed by their populations is imported and how much is produced domestically, in high tech, indoor operations aimed at producing a high potency drug'.

2.1.2 The Emergence of 'New Cannabis' – A Re-engineering

Much of the cannabis consumed in the 1960's would now be considered poor quality.

Until the mid 1970's, nearly all the cannabis consumed in North America was a landrace[7] strain of the 'sativa'[8] variety. The effects were preferred, possibly due to high levels of delta-9 tetrahydrocannabinol (THC)[9] relative to

[6] Morocco is one exception. Moroccan authorities publish scientific estimates of the scale and nature of cannabis cultivation within its borders.
[7] Landrace strains are those that have evolved over a period of time in a particular geographic region, e.g. 'Acapulco Gold'.
[8] Cannabis 'sativa' is the term applied to both the genus as well as to the most widespread variety, a tall, conical plant typically found in warmer, lowland climates.
[9] THC is believed to be responsible for most of the psychoactive effects of cannabis, although related chemicals are believed to play a role.

cannibidol (CBD)[10]. Sativas are 'late maturing' (making them difficult to grow in northerly and southerly latitudes) and 'very tall' (making them difficult to conceal outside and problematic to grow inside). These problems were overcome with the introduction of 'indica'[11] genes from Central Asia and the Middle East which accelerated the life cycle, boosted yields and produced plants that were more cold resistant and more manageable in terms of size.

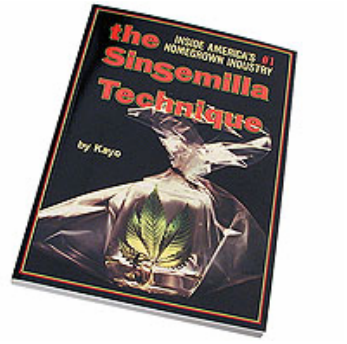


Figure 5: 'Sinsemilla Technique' Literature

Experiments crossing 'sativa' and 'indica' strains led to the development of 'skunk', a hybrid said to be 75% 'sativa' and 25% 'indica', which was amongst the first to capture the THC highs of the 'sativas' with the rapid growth cycle and yield of the 'indicas'. It remains one of the cornerstone cultivars used in contemporary breeding, and in some countries such as Australia, France, New Zealand and the United Kingdom, cannabis with a high THC content is often referred to as 'skunk'[12].

At the same time, an ancient cultivation technique was being reinvigorated. The term *'sinsemilla'* (without seeds in Spanish) refers to the product of a growing technique, not a genetic strain or special preparation of the plant. The most potent cannabis is comprised exclusively of the female flowering heads ('buds') that remain unfertilized throughout maturity and consequently, contain no seeds. The production of 'sinsemilla' requires identifying the females and ensuring they are not exposed to male pollen, and then marketing only the buds and small leaves. Cannabis cultivators in India have long known that the best cannabis comes from the unfertilized buds of the female plant, and employed 'paddars' (ganja doctors) to remove male plants from cultivation areas before they are mature enough to cause fertilisation.

Most commentators place the emergence of sinsemilla in the United States around the early to mid 1970's, and in Europe from about 1980. Nearly all high grade cannabis is grown using the sinsemilla technique and the potency is much higher than the seeded product. In 2004 THC levels in United States sinsemilla averaged approximately 10.5% (compared to 2.5% for low grade cannabis)[13] and close to 18% in the Netherlands[14]. Although extremely rare individual samples have exhibited THC levels in excess of 30%.

[10] CBD is believed to moderate the effects of THC; it is a biosynthetic precursor that converts to THC as the plant matures.
[11] Cannabis 'indica' is a squat, bushy, highland plant originating in Northern India.
[12] The term "skunk" appears to originate from an early 'sativa' / 'indica' cross, perceived as particularly pungent compared to sativa.
[13] University of Mississippi – Cannabis Potency Monitoring Project.
[14] Niesink, RJM, Rigter, S & Hoeck, J. THC Concentrates in wiet, nederweit, en hasj in Nederlandse coffee shops (2004 / 2005). Utrecht:Trimbos Institute, 2005.

Sinsemilla is distinct enough in appearance and potency to be considered a separate drug. There has been discussion of scheduling sinsemilla as a 'hard drug' in countries that have liberalised their cannabis policies.

In addition to improved breeding and the rediscovery of sinsemilla, the movement towards indoor cultivation has allowed the application of greenhouse technology to what had traditionally been a field crop. Around 1985, cannabis breeders from the United States left for the Netherlands. At that time indoor cultivation of cannabis was just starting to take off in the Netherlands, and the fusion of American breeding stock and Dutch agricultural practice sparked a revolution in cannabis breeding and production. Today, Dutch 'seed banks' sell the product of this breeding over the Internet, in competition with a growing number of international rivals, particularly Canada.

Sinsemilla production was boosted by the use of clones which means taking a cutting from a successful 'mother' plant which is rooted and planted. The cutting is a genetic duplicate of its mother and can be used to generate more cuttings, for example a square meter of mother plants can produce 100 clones per week. There are advantages in working with clones including:

- The cuttings are guaranteed to be exclusively female.
- The clones will be duplicates of a mother proven to be a successful producer.
- The clone assumes the life stage of the mother, therefore needs less time to reach flowering than would a similarly sized plant grown from seed.

Used in combination with forced flowering techniques (manipulation of the light cycle), clones dramatically accelerate the rate of cannabis production. Forced flowering results in smaller yields per plant than if each plant had been allowed to mature further, but this is more than offset by the faster overall production time and in the greater number of small plants that will fit into a given growth area.

Traditional outdoor growers are limited to one or two harvests per year. In contrast, indoor growers can stagger production to produce almost continual harvests from which clone to harvest are between eight and ten weeks, allowing between four to six harvests off the same metre of floor space. The best known example is the 'Dutch Sea of Green Technique', of which there are many variations.

2.1.3 'New Cannabis' – Potency

As early as 1980, claims were being made cannabis potency had increased by a factor of 10 (from 0.2% to 2%) over five years[15]. There have been subsequent claims that cannabis potency has increased by a factor of 30 or even 60 since the 1970's which have been criticised as exaggerated as they relied on the very low THC levels found in some early tests which may have been inaccurate due to storage issues and other methodological difficulties. There are also complications related to the nature of cannabis. For example, THC degrades over time, so the age of the sample and the conditions under which it was stored are highly relevant. The moisture content also varies greatly, and for this reason, samples seized at street level cannot be compared to samples seized during recovery of eradication operations.

Traditionally, potency has been framed in terms of either delta-9 THC content or total THC content,[16] without regard to other psychoactive cannabinoids. THC, however, is only one of a number of psychoactive chemicals in cannabis[17].

Combining forensic data with other information sources gives good reason to believe that high end cannabis is more potent than in the past and is commanding a growing share of the market in many important consumer markets. The sinsemilla technique in terms of selective breeding for potency, more selective manicuring, a greater understanding of ripeness, curing, storage and other improvements in cultivation techniques have made it possible to produce far more potent cannabis than was possible thirty years ago.

In 2004 the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) conducted a study on cannabis potency in Europe. The study cites estimates on the market share of four cannabis product types – imported herbal cannabis, cannabis resin, sinsemilla and domestic cannabis resin:

- In the Netherlands 67% of the cannabis consumed is sinsemilla and 29% imported cannabis resin, 3% imported herbal cannabis and 1% domestic cannabis resin.
- In contrast, in the United Kingdom sinsemilla forms only 15% of the total cannabis market, but it forms 50% of the herbal cannabis market.
- In Ireland, herbal cannabis is also evenly split between local sinsemilla and imports but 90% of the total cannabis market is dominated by imported cannabis resin.

[15] Bureau for International Narcotics and Law Enforcement Affairs, International Narcotics Control Strategy Report 2005, March 2005.

[16] The technique used determines which of these two values is captured. High performance liquid chromatography tests for delta-9 THC, while gas chromatography for total THC. The latter is probably the most appropriate if the goal is to determine what users are ingesting, because other forms of THC become delta-9 THC in the process of smoking.

[17] For example CBD is believed to moderate the effects of THC therefore the growth of sinsemilla which typically shows lower levels of CBD, could be changing the nature of the cannabis experience.

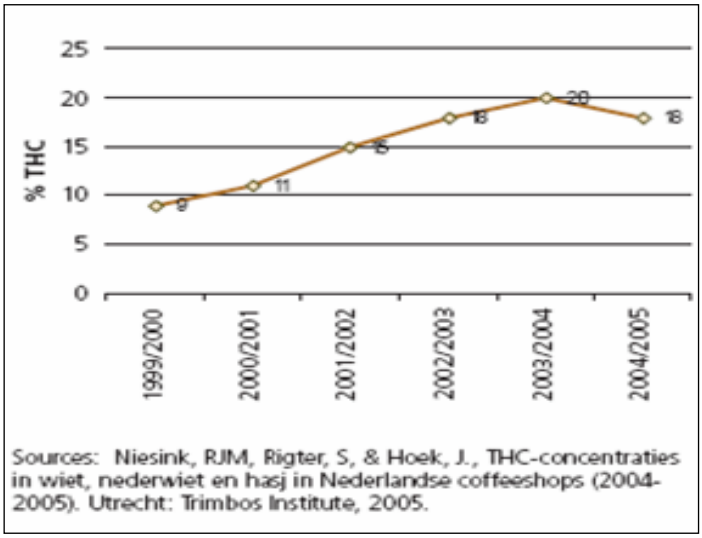


Figure 6: Sinsemilla THC Levels in the Netherlands

Thus, the three European countries in which sinsemilla information is available, the sinsemilla market either equaled or exceeded the imported herbal market.

The EMCDDA study showed dramatic increases in the sinsemilla potency in the United Kingdom (up from 6% in 1995 to over 12% in 2002). The sinsemilla THC levels in the Netherlands have increased from about 9% in 1999 / 2000 to about 16% in 2001 / 2002[18].

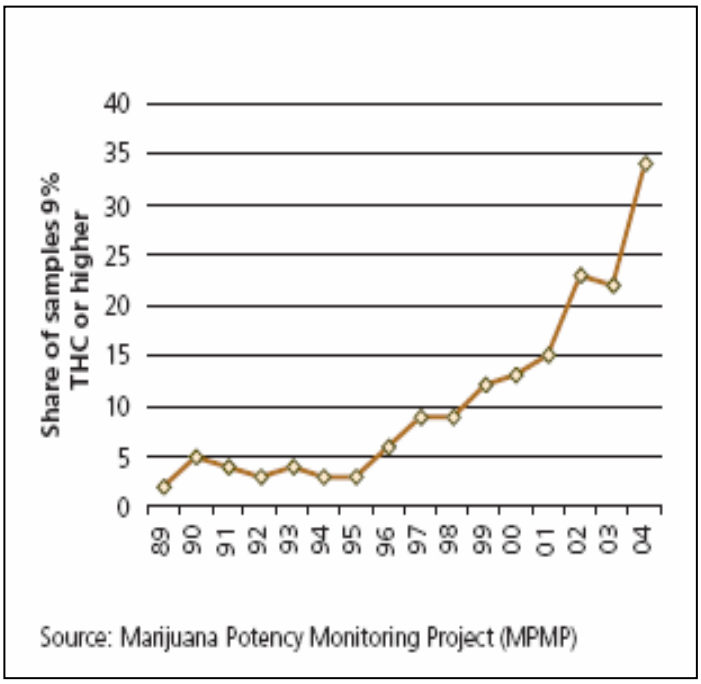


Figure 7: Share of Marijuana Potency Monitoring Project (MPMP) – Samples Testing Above 9% THC

Figure 6 depicts more recent figures from the Netherlands drawn from about 60 annual samples of the most popular strains of 'nederwiet' (sinsemilla) purchased from coffee shops show a doubling in potency between 1999 and 2003, with levels stabilising at about 18% since that time.

In the United States, virtually all cannabis seized by the agencies of the national government is tested by the Marijuana Potency Monitoring Project (MPMP) at the University of Mississippi which has been in place for over 20 years. The trend reported is an aggregated one, including both sinsemilla and low potency cannabis.

Figure 7 illustrates the trend has been strongly upward since the mid 1990's. This trend strongly suggests an increased availability of high potency cannabis. As in the case of the Netherlands, the increase has been particularly pronounced since 1999.

[18] King L., Carpenter P. and Griffiths P., An Overview of Cannabis Potency in Europe', EMCDDA Insights No.6, European Monitoring Centre for Drugs and Drug Addiction, 2004.

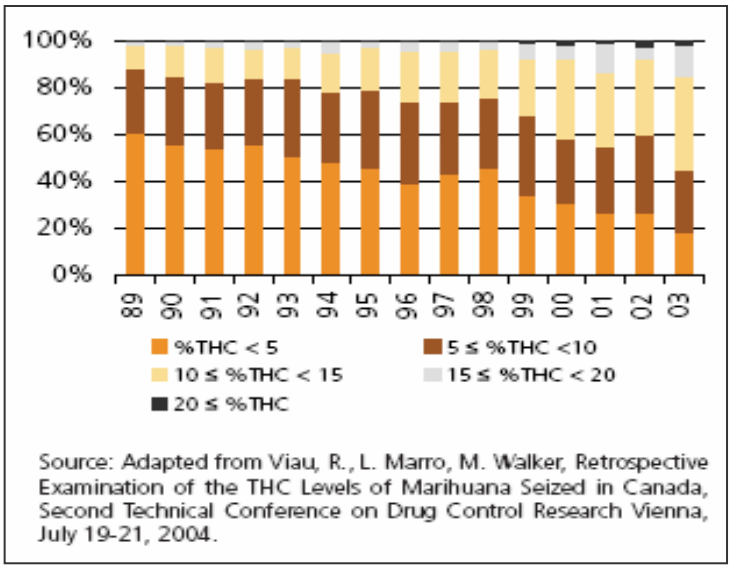


Figure 8: Canadian Cannabis Samples – THC Breakdown

In Canada, before the early 1980's, THC levels seldom reached 1%, but by the late 1990's they were over 6%.[19] Figure 8 illustrates declining shares of tested cannabis samples have less than 5% THC and a growing share that register above 10%. Very high potency samples (above 20%) remain relatively rare, but have increased since 1999. These changes are partly attributed to changes in the make up of samples submitted for analysis.

For every country where reliable data is available, it appears that sinsemilla is commanding a greater share of the cannabis herb / leaf market, and that this sinsemilla has become dramatically more potent in the last decade. It would appear the technological capacity to produce large amounts of high potency cannabis has emerged in recent decades which have serious implications for the developed countries where this product is consumed.

2.2 INTERNATIONAL CANNABIS SCHEDULING[20]

Of all the illicit drugs scheduled within the international drug control conventions cannabis is the one illicit drug that has been consistently compromised or undermined (particularly by European countries) based on what appears to be a tolerant attitude toward the so-called 'softer drugs'. Contrasting this observation some commentators might view the relaxing of cannabis control as simply a pragmatic approach to competing priorities from other drug types.

Most, if not all of these countries, have interpreted particular articles of the Single Convention on Narcotic Drugs, 1961 outside of the original intent of the Single Convention. This has facilitated legalisation or partial legalisation and attracted adverse commentary from the United Nations bodies which in effect undermines the resolve of countries who undertake stricter cannabis drug control. Dr Ian Oliver[21] noted *"…the increased availability of cannabis in Europe combined with a greater tolerance of cannabis abuse has resulted in a much larger market for the substance. Unfortunately, there is overwhelming evidence that many young people throughout Europe (and the world) have come to regard cannabis as a relatively harmless substance".*

Examples of countries that have compromised the Single Convention on Narcotic Drugs, 1961 include the:

[19] Royal Canadian Mounted Police, 'Marijuana Cultivation in Canada: Evolution and Current Trends', November 2002.
[20] See Appendix 1 – International Drug Control Conventions which also includes a brief summary of the United Nations Drug Control Organisations.
[21] Dr Ian Oliver, author of 'Drug Affliction – What You Need to Know'.

- Netherlands where the use of cannabis has been tolerated under Dutch law (in restricted circumstances) for over 25 years. Other European countries that have altered their legislation include Belgium, Switzerland, Italy, Luxembourg, Portugal and Spain.

- United States where 12 States have decriminalised personal possession of cannabis and made it an offence punishable by fine.

- Australia (South Australia, Western Australia) has decriminalised personal possession of cannabis and made it an offence punishable by fine. The cultivation of one cannabis plant attracts a fine of A$300 and possession of less than 25 grams attracts a fine of A$150.

- United Kingdom where in 2003 the British Government reclassified cannabis from a Class B to a Class C drug on the advice of the expert Advisory Council on the Misuse of Drugs (ACMD). A subsequent reduction in penalties as a result of the reclassification has also occurred.

Available literature where countries have interpreted particular articles of the Single Convention on Narcotic Drugs, 1961 include the Canadian Le Dain Commission of Inquiry into the "Non Medical Use of Drugs, 1973[22]", the Canadian Department of National Health and Welfare's 1979 report on "The Single Convention and it's Implications for Canadian Cannabis Policy[23]", "The Sackville Commission of South Australia"[24] and the American "National Commission on Marijuana and Drug Abuse, 1972[25]" offer a range of interpretations of the articles within the "1961 Convention" that pertain to possession of cannabis[26].

[22] Notes "it has been generally assumed that possession in Article 36 includes possession for use as well as possession for the purpose of trafficking? This is a reasonable inference from the terms Article 4 which obliges the parties to limit exclusively to medical and scientific purposes the production, manufacture, import, export, distribution of, trade in, use and possession of drugs…The prevailing view, however, is that the word possession in Article 36 includes simple possession for use"…but concludes "the costs to a significant number of individuals, the majority of whom are young people, and to society generally, of a policy of prohibition of simple possession are not justified by the potential harm of cannabis…we therefore recommend the repeal of prohibition against the simple possession of cannabis".

[23] Notes "the substantive argument in support of simple possession falling outside the scope of Article 36 is founded on the assumption that it is intended to insure a penal response to the problem of illicit trafficking rather than to punish drug users who do not participate in the traffic…"

[24] Notes "the Convention does not require signatories to make either use or possession for personal use punishable offences…This is because use is not specifically covered by Article 36 and the term possession in that Article and elsewhere can be read as confined to possession for the purpose of dealing". In addition "the official commentary on the 1961 Convention…adopts a permissive interpretation of possession in Article 36…whether or not the possession of drugs (including prohibited forms of cannabis) for personal use requires the imposition of penal sanctions is a question which may be answered differently in different countries"…

[25] Notes "that the word possession in Article 36 refers not to possession for personal use but to possession as a link in illicit trafficking".

[26] Various extracts from http://en.wikipedia.org/wiki/Single_Convention_on_Narcotic_Drugs

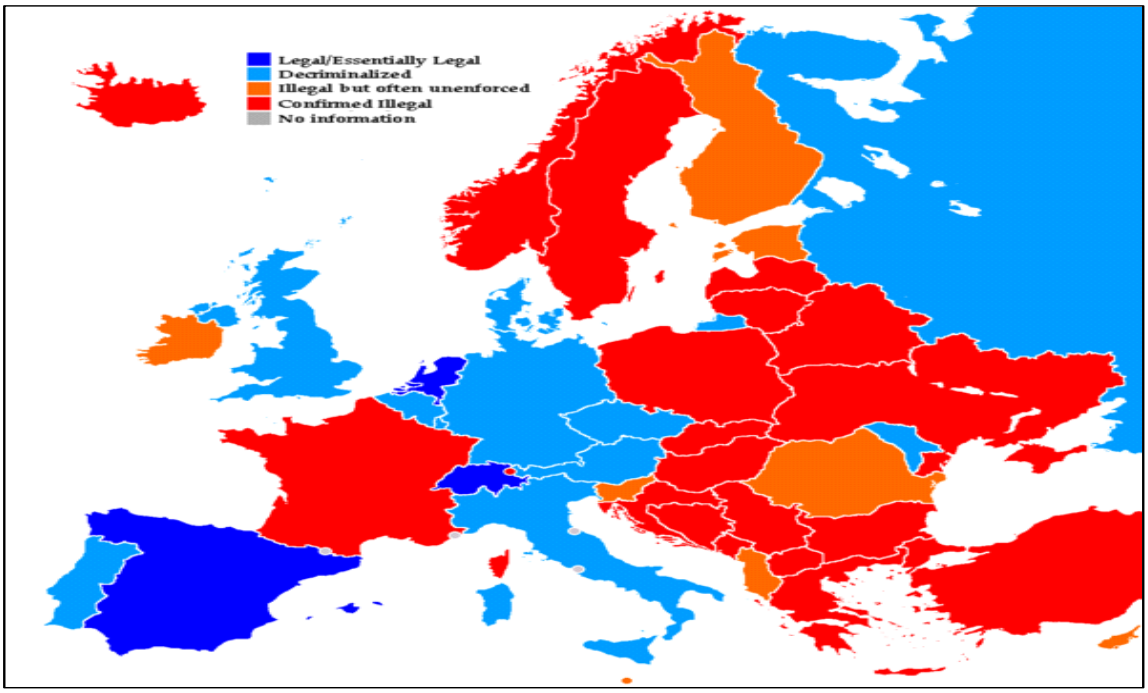


Figure 9: European Laws on Cannabis Possession ex Wikipedia

In a 2002 interview, the President of the International Narcotics Control Board, Philip O Emafo, condemned European cannabis decriminalised measures stating *"It is possible that the cannabis being used in Europe may not be the same species that is used in developing countries and that is causing untold health hazards to the young people who are finding themselves in hospital for treatment.*

Therefore, the INCB's concern is that cannabis use should be restricted to medical and scientific purposes, if there are any. Countries who are party to the 1961 Convention need to respect the provisions of the conventions and restrict the use of drugs listed in Schedules I to IV to strictly medical and scientific purposes".

In Cannabis: Why We Should Care, the international dilemma is aptly described as:

"The global community is confused about cannabis. On the one hand, cannabis is controlled under the same degree of severity as heroin and cocaine under the Single Convention on Narcotic Drugs, 1961. Virtually every country in the world is a party to that Convention. On the other hand, however, cannabis offences are treated far more leniently than those related to other narcotic drugs in many countries. A conflicting message is thus sent to the population and it is no wonder that public opinion has become confused".

2.3 INTERNATIONAL BEST PRACTICE

The UN General Assembly, at its 20th Special Session[27], adopted the *Declaration on the Guiding Principles of Drug Demand Reduction* in which it called for *"a balanced approach between demand reduction and supply reduction, each reinforcing the other, in an integrated approach to solving the drug problem".* It was clearly noted *"that neither demand reduction programmes nor supply reduction programmes alone have been fully successful in addressing the drug problem".*

The INCB[28] in its annual report for 2004 dedicated a chapter to drug strategies[29] which "emphasised" the need for a balanced approach and made several recommendations including the following:

- Supply reduction activities should be integrated into and coordinated with demand reduction activities. Efforts among government ministries and agencies for law enforcement, health, education, social issues and economic development activities should be integrated into a complimentary strategy. Efforts at various level of government should also be coordinated to ensure both a unified approach and singular commitment.
- Sustained education programmes are important in eliminating tolerance for and creating and maintaining appropriate attitudes against illicit drug availability and use. Such programmes address the perceptions of drug use; develop personal and social skills to help individuals make informed and healthy choices; create an environment where people can develop and lead healthy lifestyles; and are integrated into the public health curriculum in school community and family based prevention programmes.

The UNODC concluded 'Cannabis: Why We Should Care' by stating:

- *"The world has failed to come to terms with cannabis as a drug. In some countries, cannabis use and trafficking are taken very seriously, while in others they are virtually ignored. This incongruity undermines the credibility of the international system, and the time for resolving ambivalence on the issue is long overdue. Either the gap between the letter and the spirit of the Single Convention, 1961, so manifest with cannabis, needs to be bridged, or parties to the convention need to discuss re-defining the status of cannabis".*
- *"At the same time, the drug itself is changing. High potency sinsemilla produced in indoor cannabis factories represent genuine innovation in a substance that has been around for centuries. Its emergence highlights the fact global illicit drug markets are a moving target, and policies must be dynamic in order to address continual shifts and unexpected turns. There must be constant feedback between research and intervention if the approach to drugs issues is to be sound".*

[27] See Appendix II – 20th Special Session, United Nations General Assembly – Countering The World Drug Problem.
[28] See Appendix IV International Narcotics Control Board – Cannabis which highlights recent cannabis related commentary.
[29] International Narcotics Control Board, "Integration of Supply and Demand Reduction Strategies: Moving Beyond a Balanced Approach", 2004.

- *"In several respects cannabis is unique among illicit drugs. It is not dependent on transnational trafficking or organised crime to move from cultivator to user. Often, they are the same person, or at least socially related. There exist international advocacy groups promoting legal reform concerning the drug, a phenomenon not seen for cocaine or heroin. Medical use of the active ingredients, if not the plant itself, is championed by respected professionals. It is not surprising that national opinions on this issue have begun to diverge. It is essential, however, that consensus be regained, and that what is truly a global issue is again approached with consistency on a global level. After all, it is for precisely this that the multilateral drug control system was designed".*

2.4 INTERNATIONAL CASE STUDIES IN NATIONAL DRUG POLICY

2.4.1 Case Study 1: United Kingdom: Reclassification of Cannabis – Misuse of Drugs Act 1971

In 2001 the United Kingdom Home Office commissioned the United Kingdom Advisory Council on the Misuse of Drugs (ACMD) to report on the classification of cannabis. In March 2002 the ACMD recommended to the Home Office that all cannabis products be reclassified from Class B to Class C controlled drugs. This recommendation was accepted by Government and came into force on 29 January 2004.

In March 2005 the Home Secretary requested the AMCD to review its advice on the classification of cannabis in light of recent research suggesting:

- A casual link between cannabis use and the development of mental health problems[30]; and,
- Claims of an increasing prevalence of cannabis products with high levels of the most psychoactive ingredient, tetrahydrocannabinol (THC).

In December 2005 the AMCD reported to the Home Office after extensive consideration and discussion that:

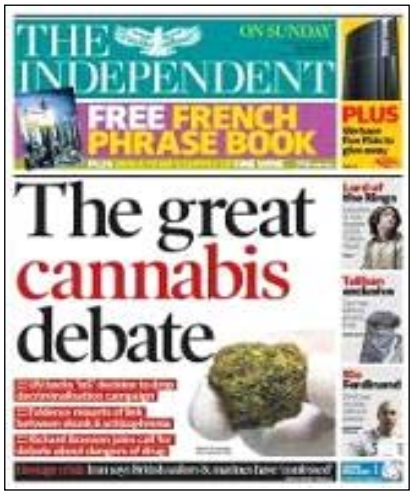
- *"While cannabis can, unquestionably, produce harms, these are not of the same order as those of substances within Class B. Nevertheless, the Council wishes to emphasise that cannabis is harmful. We therefore recommend that:*

[30] The New Zealand 'Ferguson' study (2004) was one of two studies highlighted which considered how regular cannabis use increased the risk of psychotic symptoms later in life.

1. *Further efforts are made to discourage consumption through the development and delivery of a sustained education and information strategy[31].*
2. *The availability of appropriate treatment services for those individuals experiencing difficulties arising from the use of cannabis, is reviewed by the Health Departments; and,*
3. *Research into the relationship between cannabis and mental health problems continues to be supported by public and private funds".*

- *"The extent to which the potency of cannabis products, as used by consumers, has increased over the last few years is unclear…noting there is too little information about the potency and pattern of use of cannabis products by consumers. Further research in this area is also urgently needed".*

It is possible the reclassification of cannabis in the United Kingdom is one of the reasons why the UNODC dedicated a specific chapter within the 2006 World Drug Report to 'Cannabis: Why We Should Care' in order to draw a heightened global awareness to cannabis issues in relation to 'New Cannabis'.



On 25 March 2007 the Independent published a front page article titled 'Cannabis – An Apology'. The newspaper stated *"no other issue since the Iraq war has provoked such a reaction amongst readers and other media".* The apology that has been both applauded and criticized[32] globally and is based on a 'Decriminalise Cannabis Campaign' the newspaper editor launched in 1997. The 'U-turn' or reversal in stance by the Independent is based on a medical debate about mental health as opposed to law enforcement argument about priorities in 1997. Two significant issues prompted the newspaper 'U-turn' from the stance adopted since 1997:

- The increasing evidence[33] that cannabis is a trigger factor in psychosis, especially for males, with the risk greater the younger cannabis use starts and the stronger the dose; and,
- The switch to 'skunk' cannabis or higher potency cannabis.

[31] A statement delivered on the classification of cannabis (19 January 2006) further notes 'We need a massive programme of public education to convey the danger of cannabis use. Our aim is to provide effective education in school about the risks posed by cannabis to send the right messages about the harms the drug does and to equip young people with the knowledge and courage to make the right decision' – http//www.drugs.gov.uk/news-events/latest-news/901-cannabid-classification (12/12/2006).

[32] The UN described the move as 'courageous', mental health experts a 'crucial intervention', however, pro cannabis blogs and chatrooms have essentially condemned the findings.

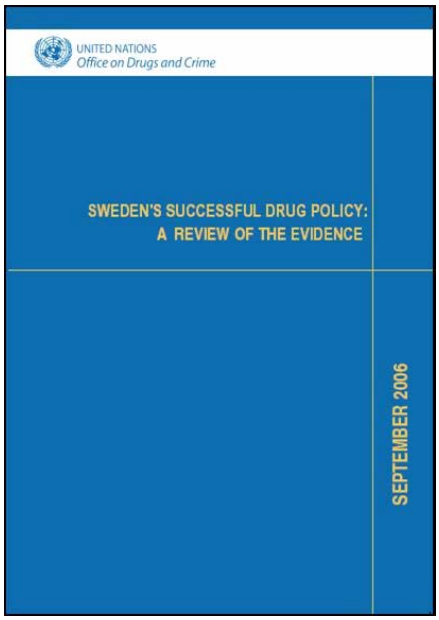
[33] One example cited was a recent research article published in the journal 'Addiction' that states 'by the end of the decade one in four new cases of schizophrenia could be triggered by smoking cannabis'. In addition, 'Addiction' predicts that 'young men who smoke cannabis will be particularly at risk'.

It was reported more than *"10,000 persons under the age of 18 needed drug rehabilitation for cannabis use"* and *"more than 22,000 people were treated in 2006 by the National Health Service for addiction and psychological problems caused by smoking skunk".*

The 'great cannabis debate' has provoked international discussion about the threat posed by cannabis in general but 'skunk' or high potency cannabis in particular in which the United Nations Office of Drugs and Crime also submitted commentary.

In July 2007, newly appointed Prime Minister Gordon Brown announced *"…the Home Secretary will consult on whether it is now right that cannabis should be moved from Class C to Class B".*

2.4.2 Case Study 2: Swedish Drug Control Policy[34]



This assessment highlights a number of European countries that pursue liberal or permissive drug policy. Sweden was one such country which led it to becoming one of the highest drug using countries in Europe. In recent years Sweden has adopted increasingly restrictive drug control strategies that addresses both supply and demand and has also invested heavily in addressing the drug problem.

In 1969 the Government of Sweden introduced a ten point programme against drugs which was weighted toward stricter law enforcement. However, it also covered demand reduction initiatives in terms of the provision of treatment services to drug abusers and the prevention of drug abuse that focussed on youth organisations. Broadly speaking, the Swedes concluded that 'society needed to have a restrictive drug policy to limit general exposure to illicit drugs. Targeting cannabis use as the first drug in the chain towards drug abuse (based on the 'gateway' theory) was also identified as a key element.

In 1978 a parliamentary bill was introduced which proposed to 'raise the standards for drug control policy efforts…to eliminate drug abuse not simply lower it'. During this period, Sweden set the vision of a 'drug free society' which remains today as the overriding provision. The ultimate aim is a 'society in which drug abuse remains socially unacceptable and drug use remains a marginal phenomenon. In this visionary aim, drug free treatment is the preferred measure in the case of addiction and prosecution and sanctions are the usual outcomes for drug related crime'.

[34] Sweden's Successful Drug Policy: A Review of the Evidence, United Nations Office of Drugs and Crime, February 2007.

In 1998 the Swedish Drug Commission was established to improve governmental action towards the 'goal of a society free of drugs' as a consequence of the economic crisis of the 1990's in which major expenditure cuts were made. The Commission identified *"major deficiencies in the field of drug control and found that the present state of drug policy is above all due to a demotion of the drug issue as a political priority".* The Commission also stated that *'Sweden's restrictive policy on drugs must be sustained and reinforced"*

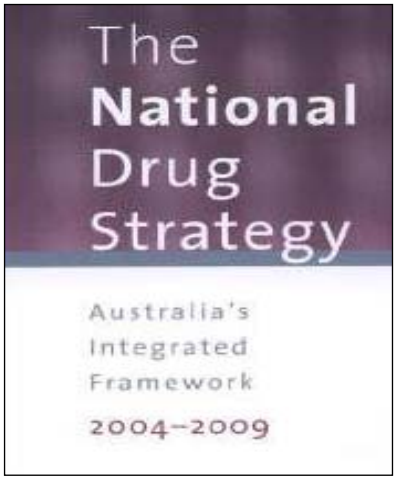
In 1995 the National Action Plan on Drugs was established which has been followed by the Swedish Anti Drug Strategy 2004–2007 that is in line with the restrictive drug policy. A new National Action Plan on Drugs was endorsed by the Swedish Parliament in 2006 that has an overall goal to 'strive for a drug free society'.
A UNODC interpretation of drug data noted *"drug use in Sweden is primarily linked to cannabis"* as it is in the rest of Europe, and',

"Sweden has low levels of cannabis use as well as low levels of overall drug use – lifetime prevalence of cannabis is just one third of the European average".

The UNODC noted at the European level "*...drug control strategies are very general in nature, leaving much room for member states to carry out their national policies. Neither the current European Union (EU) Action Plan on Drugs (2005–2008) nor the European Union Strategy (2005–2012) make reference to a society free from drug abuse, let alone, describe it is a guiding vision or principle".*

The UNODC endorsement of *"Sweden's Successful Drug Policy – A Review of the Evidence"* could provide direction for countries like New Zealand where illicit drugs have been and continue to be a significant issue.

2.4.3 Case Study 3: Australian 'National Drug Strategy'



Australia's National Drug Strategy (2004–2009) is an integrated framework that encompasses supply, demand and harm reduction strategies.

The Australian Prime Minister launched the National Illicit Drug Strategy, *'Tough on Drugs'* initiative in 1997 which forms part of the National Drug Strategy. Since its launch the Australian Government has committed more than $1.4 billion to the Strategy to fund supply and demand reduction initiatives and a wide range of other initiatives.

In a recent media statement the Prime Minister, John Howard stated the *'hard-line approach had succeeded in combating heroin and cannabis use…which had fallen from 18% to 11% over a six year period'.*

The UNODC have recently undertaken an evaluation of Australian drug policy which is to be published in the near future.

One such initiative implemented under the National Illicit Drug Strategy is the Australian National Cannabis Strategy 2006–2009. An examination of the issues that led to the development of the Australian National Cannabis Strategy suggests there is sound logic for New Zealand to consider a similar strategy or action plan that could complement the Methamphetamine Action Plan.

In November 2004, the Ministerial Council on Drug Strategy (MCDS)[35] agreed to develop a 'National Cannabis Strategy' (the first of its type) to consider the health, psychological, legal and public health issues associated with cannabis use.

On 15 May 2006 Australian National Cannabis Strategy 2006–2009 was endorsed having been developed by the Australian Government Department of Health and Aging based on consultations with key Australian stakeholders informed by existing literature and evidence. This strategy was developed under the Australian National Drug Strategy 2004–2009.

The issues that identified a need for a 'National Cannabis Strategy' in Australia included:

- Cannabis being identified as the most widely used illicit drug in Australia as it is in New Zealand.
- The adverse health, social and economic consequences of cannabis use.
- Surveys showing that adult cannabis use was *"…approved by a significant proportion of the Australian community[36] yet surveys also show that cannabis is the most common drug associated with having a drug problem"[37].*
- Legislative differences between states and territories in regards to penalties for cannabis use and possession[38]. Confusion within the community regarding the legal status of cannabis is sometimes attributed to this difference.
- At an individual level, there is growing evidence that cannabis use, particularly regular cannabis use, has the potential to have a significant impact on mental and physical health.

[35] The Ministerial Council on Drug Strategy is the primary body responsible for policy decisions in relation to licit and illicit drugs in Australia comprising Australian State and Territory Government Ministers from health and law enforcement and the Australian Government Minister for Education, Science and Training. The New Zealand equivalent is the Ministerial Committee on Drug Policy (MCDP).
[36] Australian Institute of Health and Welfare, 2005.
[37] Ibid.
[38] Both South Australia and Western Australia has decriminalised personal possession of cannabis and made it an offence punishable by a fine.

- There was evidence that people are using cannabis for the first time at increasingly younger ages.[39]
- There is evidence suggesting cannabis use is becoming increasingly more prevalent in Aboriginal and Torres Strait Islander communities.[40]
- Cannabis use rarely occurs in isolation from other drugs, with the underlying causes of harmful cannabis use also underlying harmful patterns of alcohol and other drug use.

The objective of the Australian 'National Cannabis Strategy 2006–2009 is to:

- Reduce the availability and demand for cannabis, and minimise related harms within the Australian community.

The aims of the strategy are to:

- Increase community knowledge about cannabis in Australia and associated harms and influence the level of acceptability of cannabis use within the Australian community.
- Prevent the uptake of cannabis use and minimise use in individuals and the community.
- Prevent and minimise the social, physical, mental and financial harms to individuals and the community that are associated with cannabis use; and,
- Provide effective and accessible interventions, tools, treatment and support for those who develop problems associated with their cannabis use.

The Australian 'National Cannabis Strategy 2006–2009' involves a balance between demand reduction, supply reduction and harm reduction strategies and encompasses:

- Supply reduction strategies to disrupt production and supply.
- Demand reduction strategies to prevent the uptake of harmful drug use, including abstinence oriented strategies and treatment to reduce drug use.
- Harm reduction strategies to reduce drug related harm to individuals and communities.

The four priority areas determined as the focal points are:

[39] There is an identical trend in New Zealand.
[40] New Zealand Drug Use Surveys and the New Zealand Arrestee Drug Abuse Monitoring System (2006) statistics also highlights an over representation of Maori.

- Priority Area 1: Community understanding of cannabis.
- Priority Area 2: Preventing the use of cannabis.
- Priority Area 3: Preventing problems associated with cannabis use.
- Priority Area 4: Responding to problems associated with cannabis.

The priority areas address a continuum of need from provision of simple information to the broad community, to preventing any use, to preventing problems associated with use, and to dealing with problems that arise from use (dependence). Under each Priority Area a range of issues are identified and discussed, a series of recommended responses are made and examples of good practice identified.

The broad thrust of the strategy includes recognition of the need to:

- Educate the community about cannabis use patterns, associated harms and problems and reduce the level of acceptability of cannabis use within the community.
- Prevent use in the community through prevention strategies including supply reduction through law enforcement, since the most effective way of preventing the harms associated with cannabis use is to avoid using cannabis at all.
- Assist those who already use cannabis, to decrease use and prevent the graduation from occasional to frequent cannabis use, and therefore minimise the harms associated with this pattern of use.
- Reduce the individual and broad societal problems associated with cannabis use.

The strategy also illustrates the manner in which the Priority Areas map to the Priority Areas of the Australian National Drug Strategy 2004–2009.

A specific New Zealand National Cannabis Strategy or Cannabis Action Plan is therefore considered desirable to address the significant issues New Zealand has with cannabis. In many cases, these are identical to the cannabis issues identified in Australia.

2.5 RECOMMENDATIONS

- That the National Drug Policy Team of the Ministry of Health undertakes a comprehensive evaluation of both the Swedish Drug Control Policy (particularly) and the Australian National Illicit Drug Strategy (Australian National Drug Strategy) to identify the specific policy mechanisms that are contributing to a reduction in cannabis and overall illicit drug abuse.

- That the Inter Agency Committee on Drugs (IACD) develops a 'National Cannabis Strategy' or a 'Cannabis Action Plan' under the umbrella of the National Drug Policy for endorsement by the Ministerial Committee on Drug Policy (MCDP).

3.0 THE NEW ZEALAND POLICY CONTEXT FOR CANNABIS

3.1 NATIONAL DRUG POLICY 2007–2012

The National Drug Policy (NDP) 2007 – 2012 developed in conjunction with a wide range of Government agencies is a whole of Government initiative administered by the Ministry of Health. The NDP sets out the governments' policy for tobacco, alcohol, illegal and other drugs within a single framework. The NDP goals, objectives and principles guide drug policy and inter-sector decision making about the best way to address the harms caused by drug use and identifies the population groups that require special attention.

The overarching goal of the NDP *is "to prevent and reduce the health, social and economic harms that are linked to tobacco, alcohol, illegal and other drug use".*

The Government has identified three strategic themes: economic transformation, families young and old and national identity which provides the context for the implementation of the NDP.

The NDP aims to reduce the effects of harmful substance abuse through a balance of measures that are divided into three pillars that supports a harm minimisation approach:

- Supply Control – Control or limit the availability of drugs.
- Demand Reduction – Limit the use of drugs by individuals including abstinence.
- Problem Limitation – Reduce harm from existing drug use.

The NDP recognises there is no single approach or strategy that can, on its own, address the problems, therefore a range of strategies is needed. In addition, the development of specific strategies that are responsive and culturally appropriate in addressing the needs of Maori, Pacific peoples and young people, given the over representation of these groups in many drug related problems.

The NDP notes Government agencies will incorporate the NDP objectives into the planning and prioritising of their drug work. In addition, Government agencies will be accountable by the Ministerial Committee on Drug Policy for achieving the objectives of the NDP, delivering effective policies and programmes in collaboration with other agencies to achieve a coordinated approach to reducing drug related harm.

At the formal launch of the NDP in his capacity as the Associate Minister of the Health, the Hon. Jim Anderton in his speech stated *"New Zealand has a drug problem, an alcohol problem and New Zealand has a problem admitting the seriousness of the problem".* Mr Anderton talked about *"a responsibility to make a difference"* recognising the drug problem "*is complex because of the many ways drugs affect this country*".

In addition, making a difference would be achieved *"with a map that brings agencies together around a strong policy"* and *"more cooperation between the sectors involved in reducing the harm caused by drugs".*

Mr Anderton paid tribute to the Community Action on Youth and Drugs Programme (CAYADS) stating that he had been *"an enthusiastic supporter. We have twenty-four of them up and running now and they depend on communities taking responsibility with partnership from Government agencies to reduce the harm to young people from drugs"*. Therefore, *"when law enforcement agencies like Police or Customs seize illegal drugs they are backed up by education about the harm users can expose themselves to".* Mr Anderton concluded by stating *"I look forward to making a difference for communities; and I look forward to the difference we will make to New Zealand's drug problem".*

There are differences New Zealand can make in drug control in terms of enhancements to demand reduction and supply control for cannabis and other illicit drugs which are outlined in this assessment.

3.1.1 Harm Minimisation

The international interpretation of 'harm minimisation' has become controversial and is not well understood by law enforcement. Equally, the role and contribution law enforcement makes to a harm minimisation framework is also not well understood. There is a wide body of opinion that conclude 'harm reduction' has been usurped by those who seek to legalise drugs and has become a code for the promotion of drug use[41]. In addition, 'harm reduction' has grown up around the legalisation or toleration of so called soft drugs which has persuaded some that allowing small consumption and possession on a personal basis is less harmful. For example, it is argued that by tolerating the use of cannabis there is no attraction to try harder substances[42]. Further, harm reduction policy, *"has become diluted by the mixed message that it transmits, particularly to young people, when those in authority appear to condone an inherently dangerous and criminal activity"*[43]*.*

There is little doubt internationally cannabis is one such example of the mixed message in terms of a number of countries choosing to undermine or compromise the Single Convention on Narcotic Drugs, 1961.

In contrast to the above views the Director of the International Harm Reduction Association has defined harm reduction as *"a pragmatic public health policy, which recognises that people use drugs; recognises that it is unrealistic to try to stop people from using drugs in many cases and so people will continue to use drugs; and tries to reduce to a minimum the harms from drug use caused to the individual and society".*

[41] Dr Ian Oliver, author of 'Drug Affliction – What You Need to Know'.
[42] Ibid.
[43] Ibid.

The Canadian Centre on Substance Abuse incorporates several principles of harm reduction that includes harm reduction is pragmatic: and accepts that the use of drugs is a common and enduring feature of human experience…focuses on risks and harms on the basis that by providing responses that reduce risk, harms can be reduced or avoided…and does not focus on abstinence; although harm reduction supports those who seek to moderate or reduce their drug use, it neither excludes nor presumes a treatment goal abstinence…

The UN views harm minimisation in the widest context. For example, a report on the 20th Special Session of UNGASS[44] to the Executive Director of the UNODC noted *"the concept of harm reduction*[45] *has become a battlefield for recrimination, perpetuating an unhealthy debate. The concept of harm reduction is generally understood to deal with the demand side of the problem. In fact the concept is much wider. Every drug control measure, including those sponsored by the UNODC, practices harm reduction, reducing the harmful consequences of drug production trafficking and abuse. For example, the Conventions regulating the supply – making them available for medical purposes, or prohibiting them for non medical use – are forms of harm reduction. Law enforcement leading to the conviction of drug traffickers is also reducing harm to society".*

In addition, the INCB Annual Report for 2003 emphasised that *"harm reduction approaches should not be seen to condone or promote drug abuse but should be seen to contribute to a reduction in the abuse of drugs".*

In the New Zealand context drug policy is very much aligned to the UN view of harm reduction, based on the principle of harm minimisation comprising the three pillars: supply control, demand reduction and problem limitation. The NDP 2007–2012 notes *"a harm minimisation approach does not condone harmful or illegal drug use. The most effective way to minimise harm from drugs is not to use them…but also notes harm minimisation encompasses a wide range of approaches, including abstinence-oriented strategies" and also "initiatives for people who use drugs" and "recognise that where eliminating high-risk behaviours is not possible, it remains important to minimise the personal, social and economic costs associated with those behaviours".*

3.1.2 Supply Control

The aim of supply control is to prevent or reduce harm by restricting the availability of drugs. For legal drugs this will involve restricting the circumstances in which they can be sold, supplied or consumed. For illegal drugs supply control activities will focus on controlling New Zealand's borders to prevent drugs from being imported into the country and shutting down domestic drug cultivation, manufacturing, trafficking and selling operations.

The following supply control objectives have been identified to achieve the overarching goal:

[44] Progress Report to the Executive Director as a contribution to the Mid-term (2003) Review of the 20th Special Session of United Nations General Assembly.
[45] Harm reduction is also referred to as "harm minimisation" in many jurisdictions including New Zealand.

- To prevent or reduce the supply and use of illegal drugs and other harmful drug use.
- To make families and communities safer by reducing the irresponsible and unlawful use of drugs.
- To prevent or delay the uptake of tobacco, alcohol, illegal and other drug use, particularly in Maori, Pacific peoples and young people.
- To reduce the cost of drug misuse to individuals, society and Government.

The focus of the NDP for the next five years will also include working proactively to suppress the involvement of organised and transnational criminal groups in existing drug markets and to stymie their involvement in any new markets.

The NZP Illicit Drug Strategy to 2010 (draft) and the NZCS Drug Enforcement Strategy 2006–2008 supports the supply control pillar of the NDP.

3.1.3 Demand Reduction

Demand reduction involves a wide range of activities that aim to reduce individuals' desire to use drugs. The focus for demand reduction is initiatives that aim to delay or prevent uptake, encourage drug free lifestyles or creates awareness of the risks involved with drug use.

There are a number of demand reduction programmes and initiatives in New Zealand including:

- The Ministry of Health Community Action on Youth and Drugs (CAYAD) programmes established in 24 sites throughout New Zealand that involve 'partnership with communities and aim to address the harm from drugs experienced by young people'[46].
- The Ministry of Youth Development 'Effective Drug Education' project and the production of 'Strengthening Drug Education in Schools in School Communities'[47] for Years 7–13.
- The New Zealand Drug Foundation who produce alcohol and other drug resources to support schools, work places, treatment agencies, communities and families.
- The Life Education Trust.
- The New Zealand Police DARE programme.

The Ministry of Education claims to have a strong approach to drug education. Drug education is incorporated within the health and physical education curriculum that reaches down into primary school. Further, a health and well-being contract ($880,000) is delivered nationally to primary and secondary schools.

[46] National Drug Policy 2007 – 2012.
[47] Ibid.

Whilst there are a number of valuable initiatives, there appears to be an imbalance in current New Zealand drug policy in terms of the lack of comprehensive demand reduction programmes particularly a sustained school based drug education and intervention programme embedded into the curriculum commencing at primary school. Such initiatives would enable reductions in the demand for illicit drugs to be achieved over the long term, thereby complementing current supply reduction initiatives.

3.2 NEW ZEALAND'S DRUG CLASSIFICATION FRAMEWORK[48]

3.2.1 Classification of Cannabis

New Zealand is required to classify certain drugs in accordance with UN Convention recommendations. The classification status of the UN recommendation may impact on how New Zealand classifies a substance.

There are differences between the UN drug classification framework and New Zealand's drug classification framework which can make classification complicated. For example, two of the UN Conventions (the 1961 and 1971 Conventions) have four schedules whilst the 1988 Convention has two tables in an Annex. The Misuse of Drugs Act 1975 has three schedules which are the:

- First Schedule, commonly referred to as Class A drugs (very high risk).
- Second Schedule, commonly referred to as Class B drugs (high risk).
- Third Schedule, commonly referred to as Class C drugs (moderate risk).

Classification is based on "the risk of harm" that the misuse of a drug poses to individuals or society. The Misuse of Drugs Act 1975 uses a three pronged classification of "very high risk", "high risk", and "moderate risk". To assess the risk of harm the Misuse of Drugs Act 1975 provides a list of relevant factors including the potential therapeutic value and the risk to public health.

The correct classification or reclassification of a particular drug is a matter of consideration and deliberation by the Expert Advisory Committee on Drugs (EACD).

Cannabis is usually found in one of two forms:

- Cannabis which has been subjected to some form of processing referred to as cannabis preparations. The term "cannabis preparations" means any preparation containing tetrahydrocannabinol, including cannabis resin and cannabis oil.

Cannabis preparations are classified under the Second Schedule, Class B, Part One.

[48] Cannabis in New Zealand 2000 – A Profile prepared by the National Drug Intelligence Bureau.

- Cannabis that is naturally occurring from the plant.

Cannabis that is non prepared cannabis or cannabis plant is classified under the Third Schedule, Class C, Part One.

The seeds of the cannabis plant are also controlled under the Third Schedule, Class C, Part One.

3.2.2 Offences and Penalties

The Misuse of Drugs Act, 1975 is subject to administration by the Director General of the Ministry of Health.

The Ministry of Justice administers the Misuse of Drugs Amendment Act, 1978 – Part II dealing with detention enforcement and sentencing. The enforcement of this legislation is undertaken by the New Zealand Police and New Zealand Customs Service.

The Misuse of Drugs Act 1975 provides penalties for:

- the unlawful dealing in controlled drugs (Section 6),
- the unlawful possession and use (Section 7), and
- the unlawful cultivation of prohibited plants (Section 9).

Unless otherwise provided for elsewhere in the Misuse of Drugs Act, Section 6, subsection (1) outlaws:

- the importation, exportation; or,
- production or manufacture; or,
- supply and administration or to otherwise deal in any Class A or Class B controlled drug; or,
- supply or administer any Class C controlled drug to a person under 18 years of age; or,
- sell or offer to sell any Class C controlled drug to a person of or over 18 years of age; or,
- have possession of any controlled drug for any of the purposes set out as above.

Subsection 2 provides penalties for contravention of any of the above and in the case of a Class B controlled drug to a term of imprisonment not exceeding 14 years, and in the case of any other drug (except a Class A controlled drug) to a term not exceeding 8 years.

For the purposes of determining whether a person is in possession of a controlled drug for the above purposes, this section provides for minimum quantities for presumption for supply / dealing. In the case of cannabis as a Class B controlled drug this quantity is 5 grams or more and in the case of a Class C controlled drug, 28 grams or more, or 100 or more cigarettes containing any cannabis preparation or cannabis plant.

Unless otherwise provided for elsewhere in the Misuse of Drugs Act 1975, Section 7 (1) prohibits:

- To procure or have possession, or consume, or smoke or otherwise use any controlled drug.
- Supply or administer, or offer to supply or administer any Class C controlled drug or otherwise deal in any such controlled drug.

Subsection 2 provides penalties for contravention of the above which in the case of cannabis is a term of imprisonment not exceeding 3 months and / or a fine not exceeding $500.

Unless otherwise provided for elsewhere in the Misuse of Drugs Act, 1975, Section 9 prohibits the cultivation of any prohibited plant

3.3 HEALTH SELECT COMMITTEE INQUIRY REPORT ON CANNABIS

In late 2000 the Health Committee of the 46th Parliament resolved to inquire into public health strategies to address cannabis use, and determine the most appropriate legal status for cannabis. The select committee was unable to complete the inquiry before the 46th Parliament was dissolved.

The Health Committee of the 47th Parliament resolved to resume the inquiry using the same Terms of Reference:

> *To inquire into the most effective public health and health promotion strategies to minimise the use of and harm associated with cannabis, and consequently the most appropriate legal status of cannabis.*

The select committee presented its final report to the House on 8 August 2003 which incorporated twenty-three recommendations to the Government:

- Youth
    1. That it take a leading role in promoting the message that young people should not use cannabis.

    2. That it note the heavy use of cannabis by 18 to 24 year olds, and the trend to increasing use by 15 to 17 year olds – in particular young women – and develop policy to reverse this trend.

3. That it adopt an 'all of government' approach to enhance the quality, and ensure the accuracy, of youth-appropriate health messages.

- Research

4. That the Institute of Environmental Science and Research Ltd (ESR) undertake survey work to establish the level of THC in artificially grown cannabis in New Zealand.

5. That it require ESR to test all suicide referrals for traces of all illegal drugs and alcohol, including cannabinoids, in order to further investigate the extent of the relationship between cannabis use and suicide in New Zealand.

6. That the ESR develops a mechanism by which impairment by cannabis could be detected.

7. That ESR test all people killed in road accidents for traces of all illegal drugs and alcohol, including cannabinoids.

8. That it undertakes research into the effectiveness of community action programmes in New Zealand.

9. That the Ministry of Education conduct research into school stand downs, suspensions and expulsions as a result of incidents involving cannabis.

- Health Programmes and Education

10. That it commit to ongoing funding for the community action-based education programmes, on the basis of evidence-based outcomes.

11. That there be continued delivery of effective programmes that take into account cultural perspectives to minimise cannabis and alcohol related harm, on the basis of evidence-based outcomes and conditional on successful project evaluations.

12. That programmes with a specific cultural orientation be expanded to encompass other cultural groups in New Zealand.

13. That it notes our concern that most young people who use cannabis do so in an environment that is not conducive to well informed decision making, and ensure that useful information is readily available.

14. That drug and alcohol education be an integral and ongoing part of the health curriculum.

15. That the Ministry of Education examine how best to support schools and students in responding to cannabis use in a way that preserves educational opportunities.

16. That it ensures provision of harm reduction information designed to minimise lung damage resulting from the smoking of cannabis.

- Legal Status

17. That the Expert Advisory Committee on Drugs (EACD) gives a high priority to its reconsideration of the classification of cannabis.

18. That it pursues the possibility of supporting the prescription of clinically tested products for medicinal purposes.

- Police

19. That it follows up allegations that the Police discriminate against Maori as highlighted in the Christchurch Health and Development Study.

20. That the Ministry of Justice consider the content of this report as part of its review of the eligibility criteria for legal aid, as set out in the Legal Services Act 2000 and the Legal Services Regulation 2000.

21. That it consider diverting minor cannabis offenders into compulsory health assessment for first possession and use offences, rather than a criminal conviction.

22. That the Police expand the diversion scheme for cannabis offences, and apply diversion consistently in all parts of New Zealand, so that fewer minor cannabis offences are prosecuted through the courts.

23. That the Police examine procedures relating to diversion for cannabis offences in order to determine how greater consistency and fairness might be achieved.

A number of recommendations centred on young people and cannabis use, in particular heavy use by 18 to 24 year olds and the trend to increasing use by 15 to 17 year olds. All members of the committee 'strongly supported protecting New Zealand's youth from the adverse effects of cannabis use'[49]. The recommendations also had a strong emphasis on appropriate health programmes and education.

[49] New Zealand Country Report to 47th Session of the Commission on Narcotic Drugs.

Later in this assessment, it is identified that there are continuing high levels of cannabis use by young people and a gradually increasing trend by those persons <13 years of age through to 18 years of age from 2001 to 2006. In addition, cannabis related publicly funded hospital admission data identified a high proportion of admissions as males under the age of 30.

A number of the recommendations made in this assessment complement the Health Select Committee Inquiry Report on Cannabis.

3.4 RECOMMENDATIONS

- That enhanced comprehensive school-based drug education and intervention programmes commencing at primary school are developed as an immediate priority. Enhanced programmes should initially be focussed within the Police Districts and District Health Boards where cannabis is identified as most prevalent.

- That the EACD undertake an evaluation of cannabis once the findings are published from the ESR and New Zealand Police studies in relation to:
  - The THC content and yields achieved from hydroponically cultivated cannabis; and,
  - The THC content in New Zealand Police seizures of cannabis plant and cannabis plant material cultivated in New Zealand.

4.0 CANNABIS HARM

The classification of an illicit drug in New Zealand is based on the 'risk of harm' that the misuse of a drug poses to individuals or society. One measure of harm is the identification and analysis of cannabis related hospital admission data.

4.1 DISTRICT HEALTH BOARD BOUNDARIES VERSUS POLICE DISTRICT BOUNDARIES

Publicly funded cannabis related hospital admission data has been obtained from District Health Boards via the Ministry of Health. This data identifies primary and secondary cannabis related admissions between 2001 and 2005. Data from 2006 was also made available but was incomplete, therefore not used.

Figure 10 below depicts the District Health Boards within New Zealand.

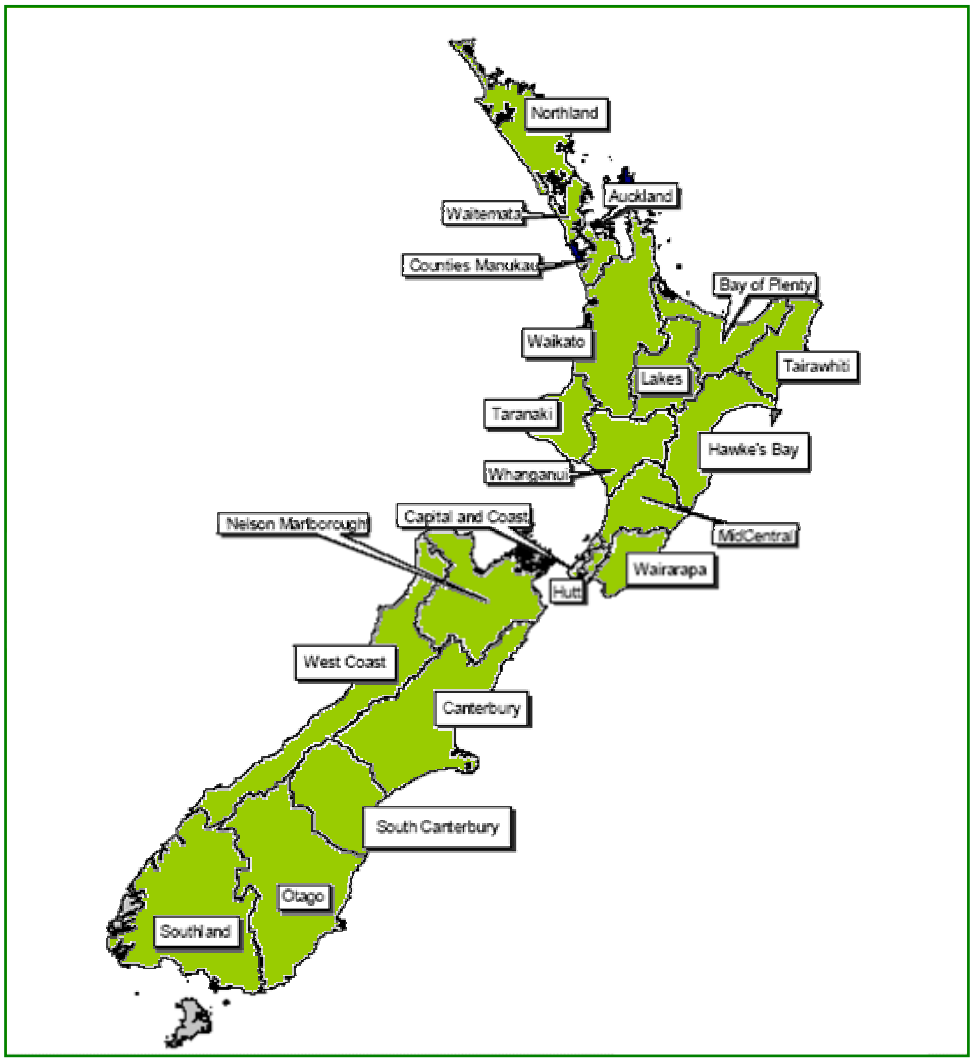


Figure 10: District Health Boards in New Zealand

For the purposes of this assessment the District Health Boards have been integrated into the twelve New Zealand Police Districts (see Figure 11 below) to assist in identifying cannabis trends and issues within a particular Police District when compared with cannabis seizure data highlighted later in this assessment.

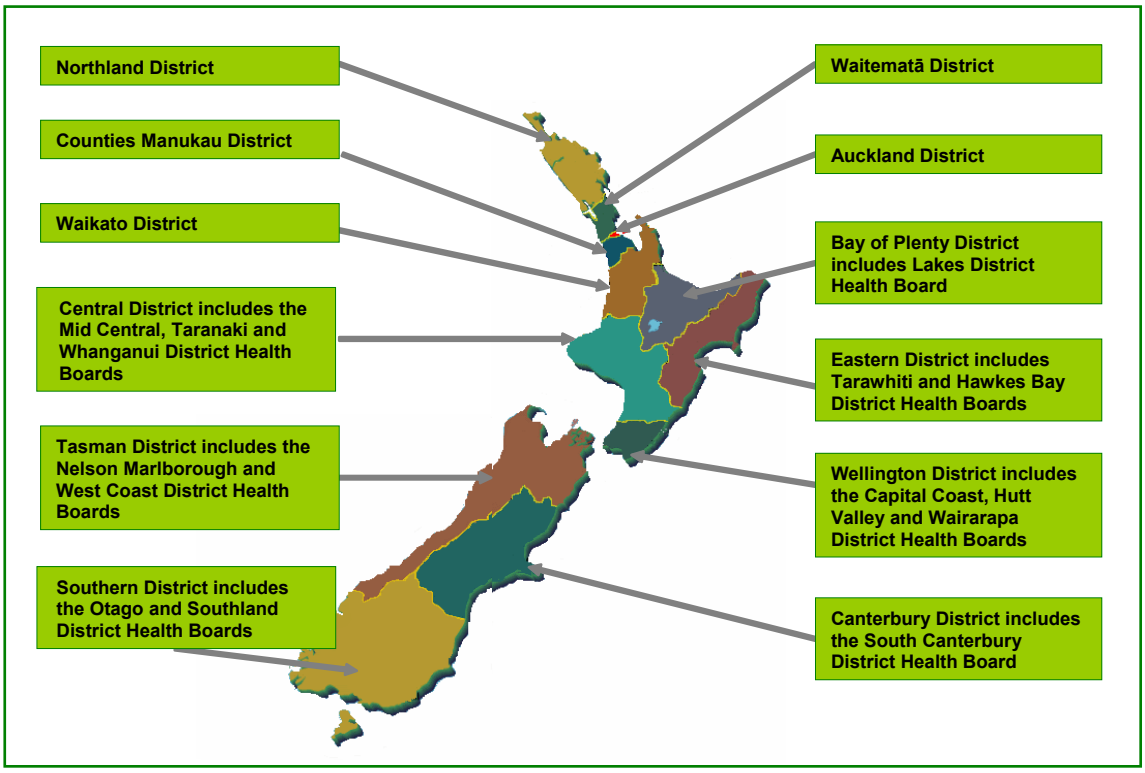


Figure 11: New Zealand Police Districts

In addition to the above 12 Police Districts Auckland Metro Crime and Operations Support (AMCOS) sits over the Auckland, Waitematä and Counties Manukau Districts and has responsibility for investigating serious crime across the three Districts.

4.2 CANNABIS RELATED PUBLICLY FUNDED HOSPITAL ADMISSIONS

Of all illicit drug related admissions to publicly funded hospitals Figure 12 illustrates that between 2001 and 2005 cannabis related admissions, perhaps surprisingly, exceeds admissions for opiates, amphetamines and cocaine combined. It is therefore an illustration of the health related harm posed by cannabis abuse.

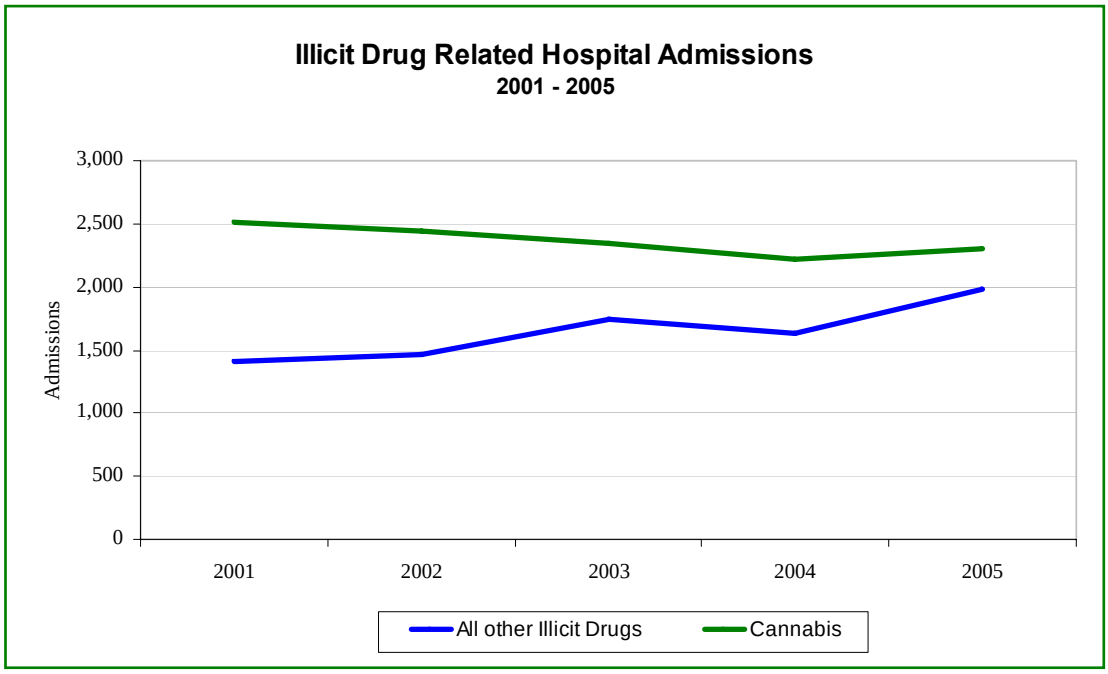


Figure 12: Illicit Drug Related Hospital Admissions – Cannabis vs All Other Illicit Drugs

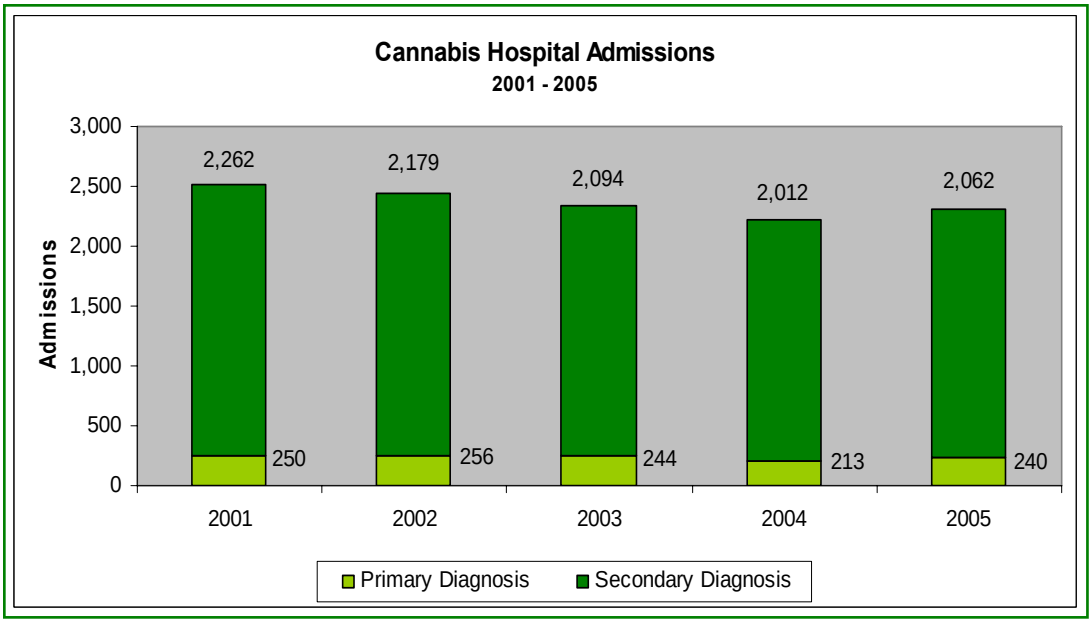


Figure 13: Publicly Funded Cannabis Hospital Admissions 2001 – 2005

Cannabis related admissions to publicly funded hospitals, as depicted in Figure 13 above are categorised as either a 'primary diagnosis' or 'secondary diagnoses[50]'. Between 2001 and 2005 there have consistently been in excess of 2000 primary and secondary admissions combined per calendar year nationally. The trends noted include:

[50] The data includes cannabis related 'emergency room' admissions which have steadily increased from 61 in 2001 to 88 in 2004. In 2005 a significant increase of approximately 50% occurred when 142 cannabis related emergency room admissions were recorded.

- Primary diagnoses consistently tracking between 210 and 250 admissions.
- Secondary diagnoses decreasing by approximately 10% between 2001 and 2004 but in 2005 moved slightly upward again.

4.2.1 Primary Diagnosis Admissions

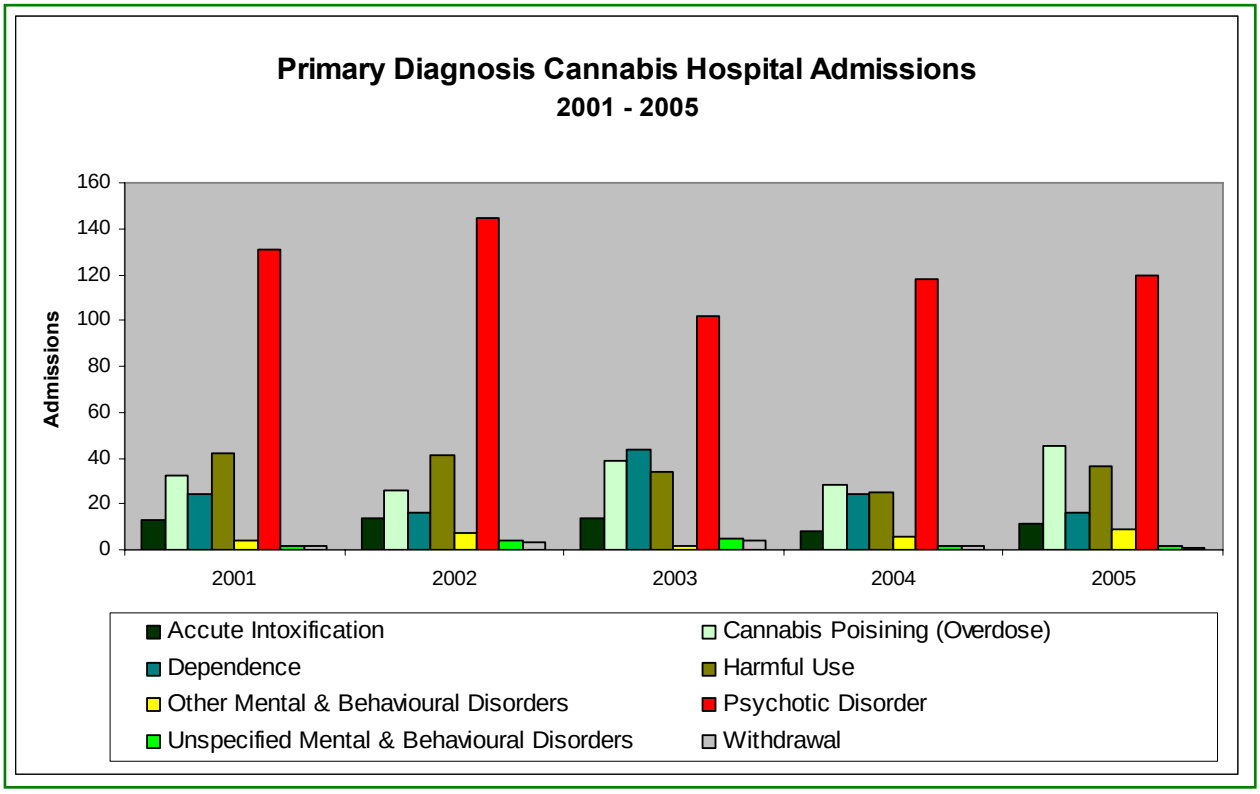


Figure 14: Publicly Funded Cannabis Hospital Admissions 2001 – 2005 – Primary Diagnosis

Figure 14 above provides a breakdown of primary diagnosis admissions and the specific diagnosis made. As illustrated, 'psychotic disorders' made up approximately 50% of primary diagnosis admissions. 'Cannabis poisoning' or 'overdose' comprise approximately 20% of the primary diagnosis admissions in 2005 which is an overall increase since 2001.'Dependence' and 'harmful use' comprise approximately 10% of primary diagnosis admissions each.

4.2.2 Secondary Diagnosis Admissions

Figure 15 below provides a breakdown of secondary cannabis related admissions and the specific secondary diagnosis made.

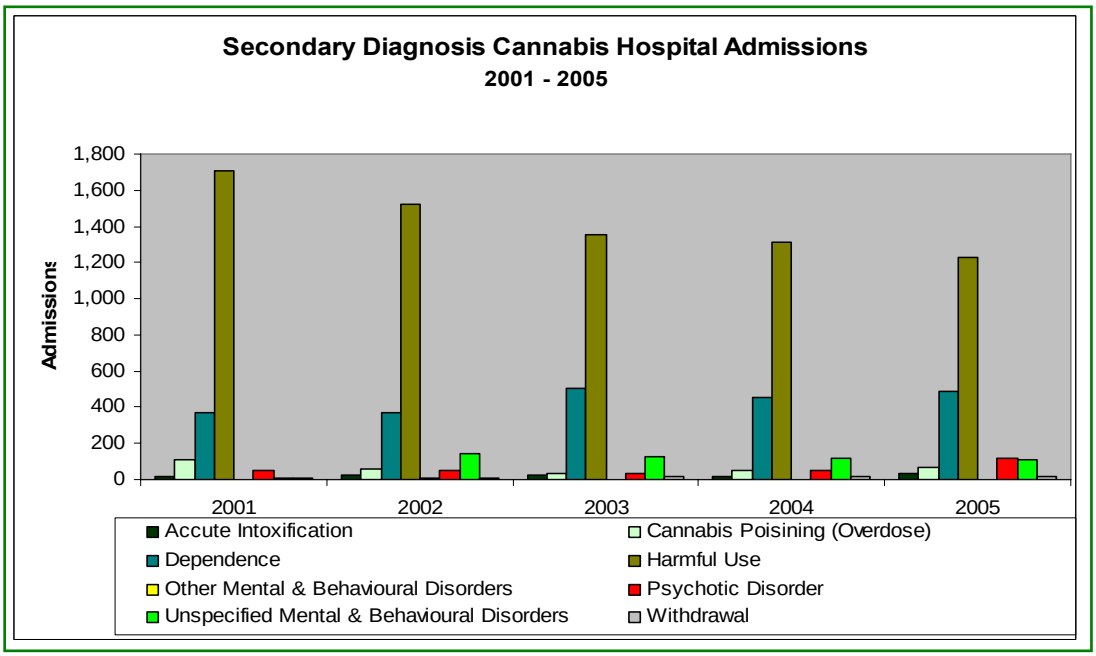


Figure 15: Publicly Funded Cannabis Hospital Admissions 2001 – 2005 – Secondary Diagnosis

In contrast to the relatively consistent primary diagnosis trend, secondary diagnoses depict an overall decline nationally of approximately 10% between 2001 and 2004 but in 2005 moved slightly upward again. The secondary diagnosis is dominated by 'harmful use' which made up approximately 80% of the diagnoses in 2001 but declined to approximately 60% in 2005. In comparison 'dependence' (addiction) has increased by more than 30% between 2001 and 2005 and significantly 'psychotic disorder' by more than 100% between 2004 and 2005. In addition, 'unspecified mental and behavioural disorders' have tracked consistently around 5% of the secondary diagnoses.

Figure 16 below provides a further breakdown of secondary cannabis related admissions in terms of highlighting the primary diagnosis undertaken.

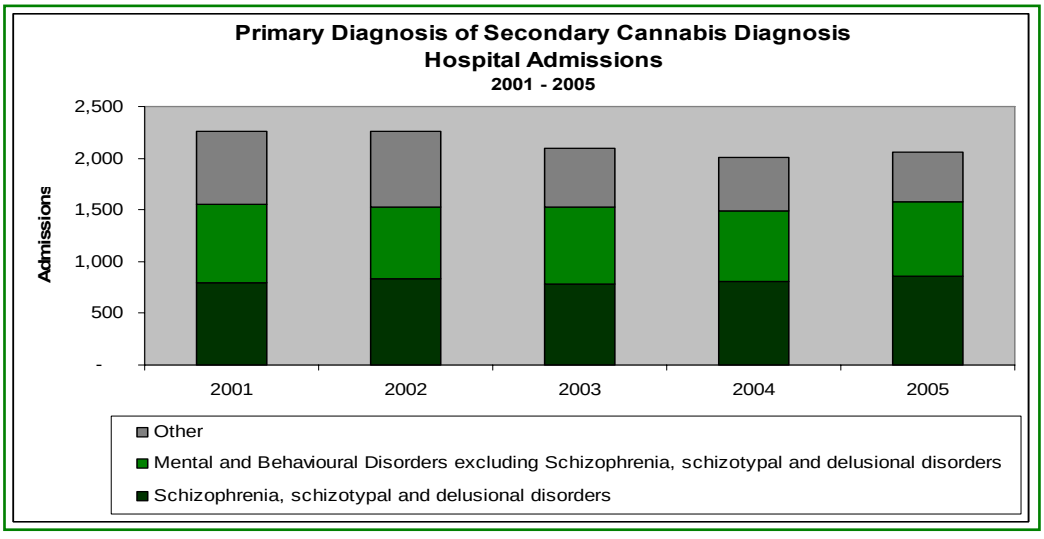


Figure 16: Primary Diagnosis of Secondary Cannabis Diagnosis Hospital Admissions – 2001- 2005

Mental and Behavioural Disorders which includes Schizophrenia, Schizotypal and Delusional Disorders made up approximately 70% of the primary diagnosis in 2001. Since 2001 the secondary diagnosis Cannabis Hospital Admissions have decreased by approximately 10% nationally however the Mental and Behavioural Disorders component have increased slightly. In addition, the Schizophrenia, Schizotypal and Delusional Disorders component of Mental and Behavioural Disorders have also increased by approximately 10%.

Significantly, of admissions for which cannabis has been identified as a secondary diagnosis, 70% have been admitted for a primary diagnosis of Mental and Behavioural Disorders or Schizophrenia, Schizotypal and Delusional Disorders.

4.2.3 Cannabis Hospital Admissions by Police District

For the purposes of identifying cannabis hospital admission trend data within specific Police Districts the District Health Boards were grouped to align with Police Districts.

Figure 17 below depicts cannabis hospital admissions by Police District between 2001 and 2005. When interpreting this trend data three general trends are visually apparent:

- Overall reductions in the Northland, Auckland City, Counties Manukau, Waikato Wellington and Tasman Districts.
- Overall increases in the Bay of Plenty, Eastern, Central and Canterbury Districts.
- Relatively stable trends in the Waitematä and Southern Districts.

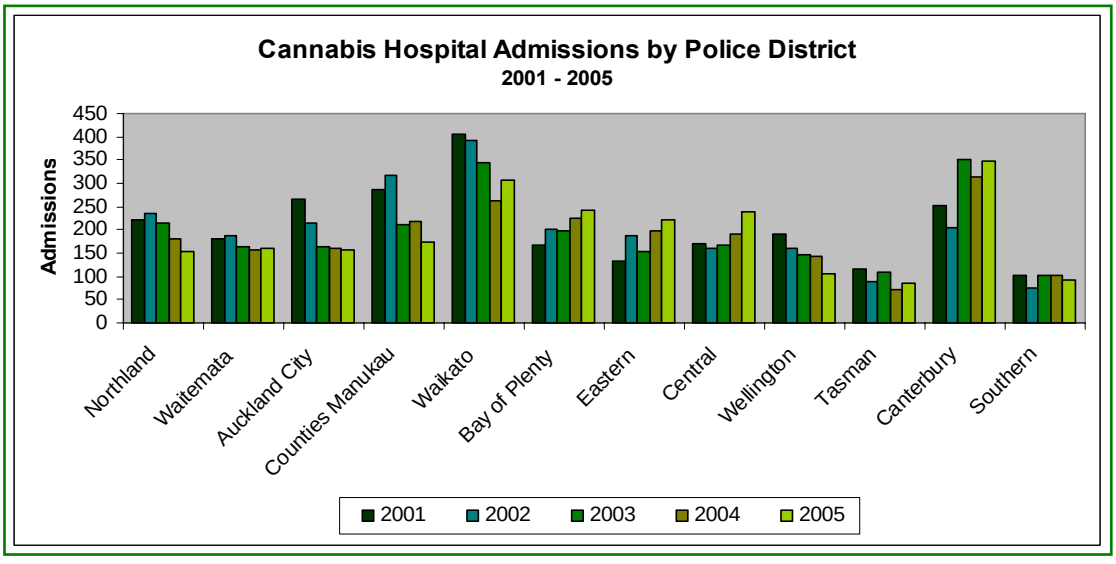


Figure 17: Cannabis Hospital Admissions by Police District – 2001 – 2005

Cannabis hospital admission data by Police District is further amplified when overlaid with Police District population data to gain a better perception of cannabis issues within a particular District. When interpreting the overlaid cannabis hospital admissions and population trend data within Police Districts three general trends are again visually apparent but more importantly an indicator is provided as to the extent of cannabis prevalence and abuse.

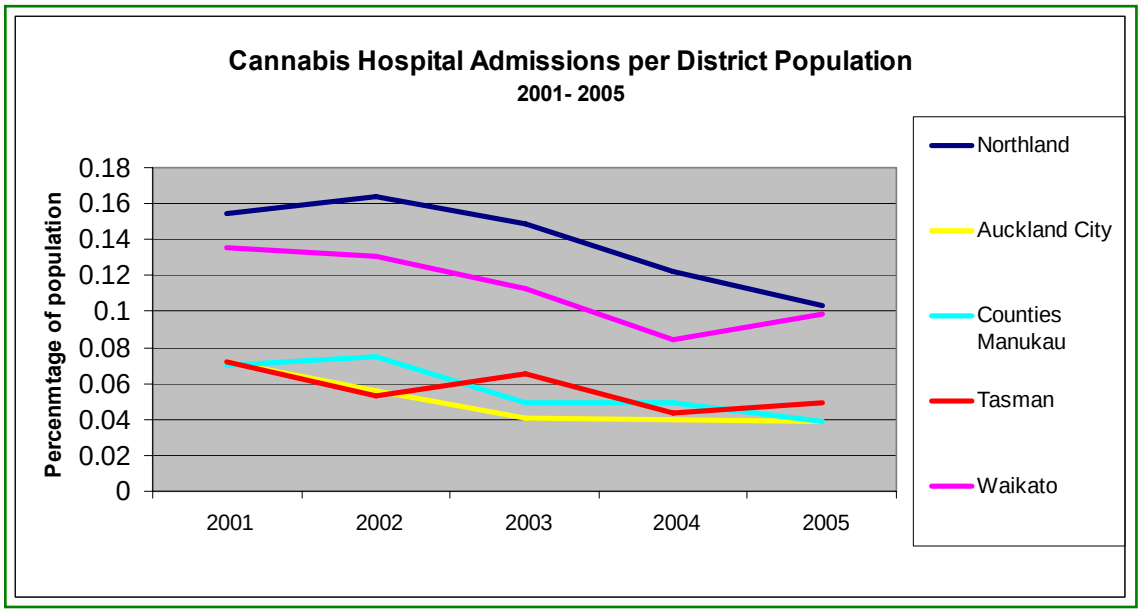


Figure 18: Cannabis Hospital Admissions per District Population – 2001 – 2005

Figure 18 depicts the Police Districts in which an overall reduction in cannabis hospital admissions is recorded. The Northland District has achieved a significant reduction since 2002 and is likely to reflect the strong emphasis on illicit drug offending in terms of prioritising drug enforcement (and alcohol) by the former and current District Commanders which has resulted in 'total crime in the Northland District falling by 8%...one of the major factors in the overall decline was an 83% decrease in methamphetamine offences…and a 39% decrease in cannabis offences'[51].

Although an overall reduction is recorded in the Waikato District since 2001, the 2005 data illustrates an upward trend movement.

From a national perspective, the Northland and Waikato Districts have significantly higher cannabis hospital admissions per proportion of population than other Districts, therefore continued emphasis on prioritising drug enforcement within these Districts is appropriate.

[51] Media Release, District Commander Northland, Superintendent Mike Rusbatch, 04 April 2007.

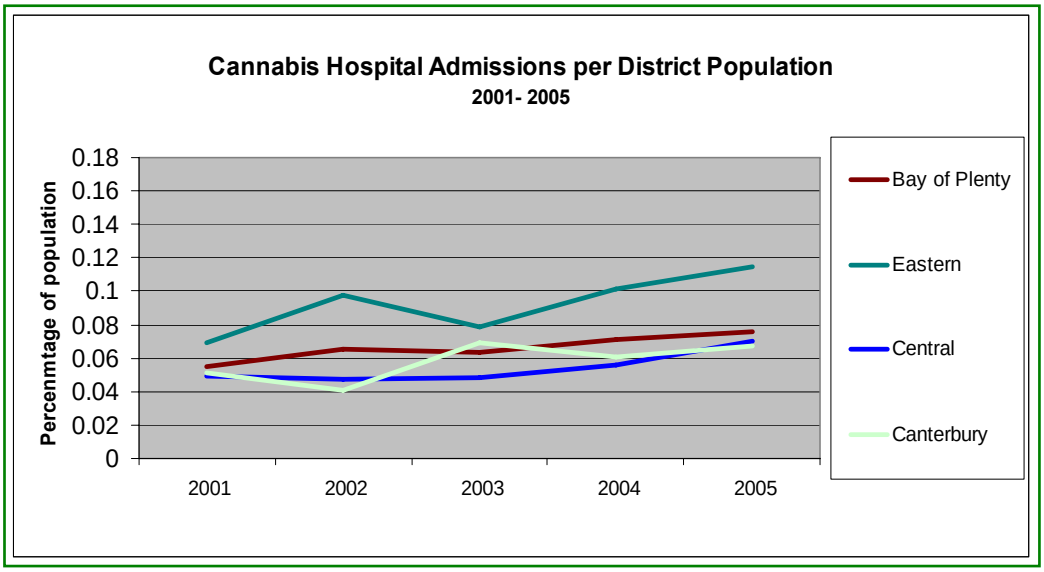


Figure 19: Cannabis Hospital Admissions per District Population – 2001 – 2005

Figure 19 depicts the Police Districts where an overall increase has occurred by proportion of population that includes the Bay of Plenty, Eastern, Central and Canterbury Districts.

The Eastern District sits alongside the Northland and Waikato Districts in terms of ranking the highest number of cannabis hospital admissions by Police District per population. The 'Top 5' ranking is therefore recorded as follows:

1. Eastern District has the highest number of cannabis hospital admissions nationally (0.11435%) per District population (194,140 @ 2005) and is increasing.

2. Northland District has the 2nd highest number of cannabis hospital admissions nationally (0.103655%) per District population (146,640 @ 2005) but has decreased significantly (from 0.154589) since 2001.

3. Waikato District has the 3rd highest number of cannabis hospital admissions nationally (0.09848%) per District population (311,740 @ 2005) which has decreased (from 0.135707%) in 2001 but as previously noted has increased again in 2005.

4. Bay of Plenty District has the 4th highest number of cannabis hospital admissions nationally (0.075992%) per District population (317,140 @ 2005) which has steadily increased (from 0.54934%) in 2001.

5. Central District has the 5th highest number of cannabis hospital admissions nationally (0.069706%) per District population (340,000 @ 2005) which has steadily increased (from 0.049724%) in 2001.

The cannabis hospital admission data provides supporting evidence for an expansion to the funding base for the 'National Cannabis and Crime Operation' to enable an increased emphasis on the Northland District but also the unexploited areas of the Eastern, Waikato and Central Districts.

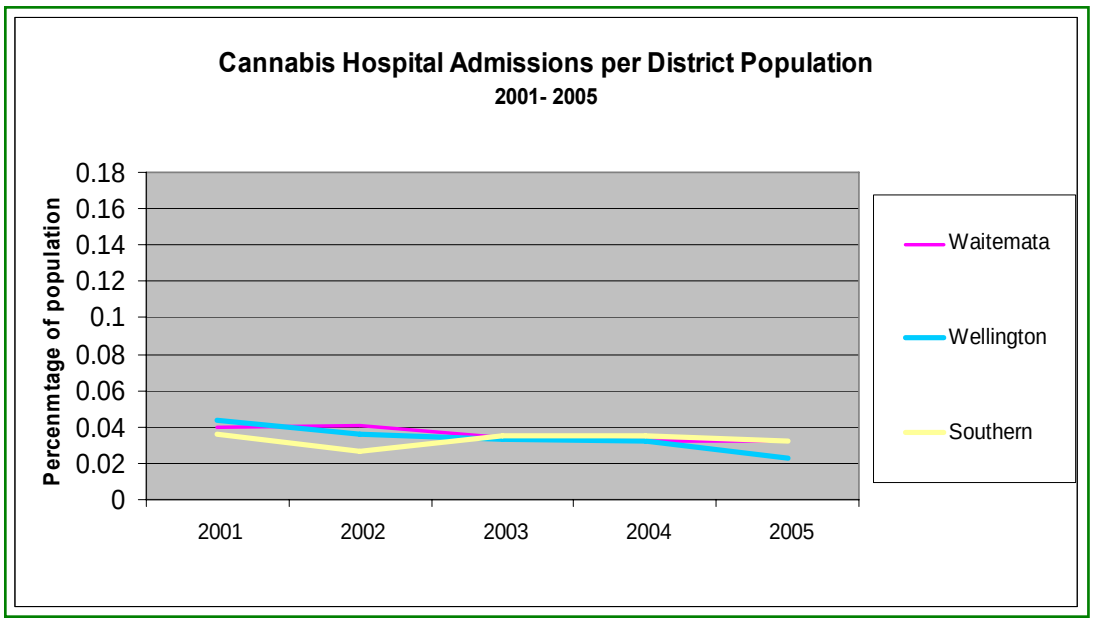


Figure 20: Cannabis Hospital Admissions per District Population – 2001 – 2005

Figure 20 depicts the Police Districts (Waitematä, Wellington and Southern) that have relatively lower, generally declining and more stable cannabis hospital admission trend data per District population compared to other Districts.

4.2.4 Cannabis Hospital Admissions by Gender and Age

The abuse of cannabis by young New Zealanders is a key focus of this assessment primarily because of the widely held perception that cannabis is a harmless drug. Many young people know national policies on cannabis vary from country to country that includes partial legalisation in some countries which portrays confusing and conflicting messages about the perceived harms posed by cannabis. Such messages ultimately undermine the credibility of the international drug control system and the findings of inquiries such as the 2003 Health Select Committee Inquiry Report on Cannabis.

The Health Select Committee Inquiry Report on Cannabis acknowledged the heavy use of cannabis by 18 to 24 year olds and the trend to increasing use by 15 to 17 year olds. A number of recommendations were made (Youth) that included developing policy to reverse the trend to increasing and heavy use of cannabis by young people, promoting messages that young people should not use cannabis and an 'all of government' approach to youth appropriate health messages. Recommendations for health programmes and education were also made.

Enhanced comprehensive school based drug education embedded into the curriculum commencing at primary school is one of a number of key recommendations of this assessment.

In terms of cannabis hospital admissions by gender and age figure 21 depicts:

- Overall approximately 50% or more males (for each year between 2001 and 2005) than females are adversely affected by cannabis abuse.
- Overall between 2001 and 2005 there has been a decrease of approximately 10%, however there was a slight increase recorded in 2005 which is generally reflected uniformly across the age ranges (with the odd exception).
- In both males and females the 10 to 14 year age range is the first indicator of adverse effects of cannabis abuse resulting in hospitalisation.
- In both males and females the 15 to 19 year age range is where it is first clearly apparent the substantive adverse effects of cannabis abuse are impacting resulting in hospitalisation.

The International Best Practice section notes 'sustained education programmes are important in eliminating tolerance for and creating and maintaining appropriate attitudes against illicit drug availability and use. Such programmes address the perceptions of drug use; develop personal and social skills to help individuals make informed and healthy choices; create an environment where people can develop and lead healthy lifestyles; and are integrated into the public health curriculum in school community and family based prevention programmes'.

The dotted line depicted in Figure 21 proposes the introduction of enhanced comprehensive drug education and intervention programmes embedded into the curriculum commencing at primary school.

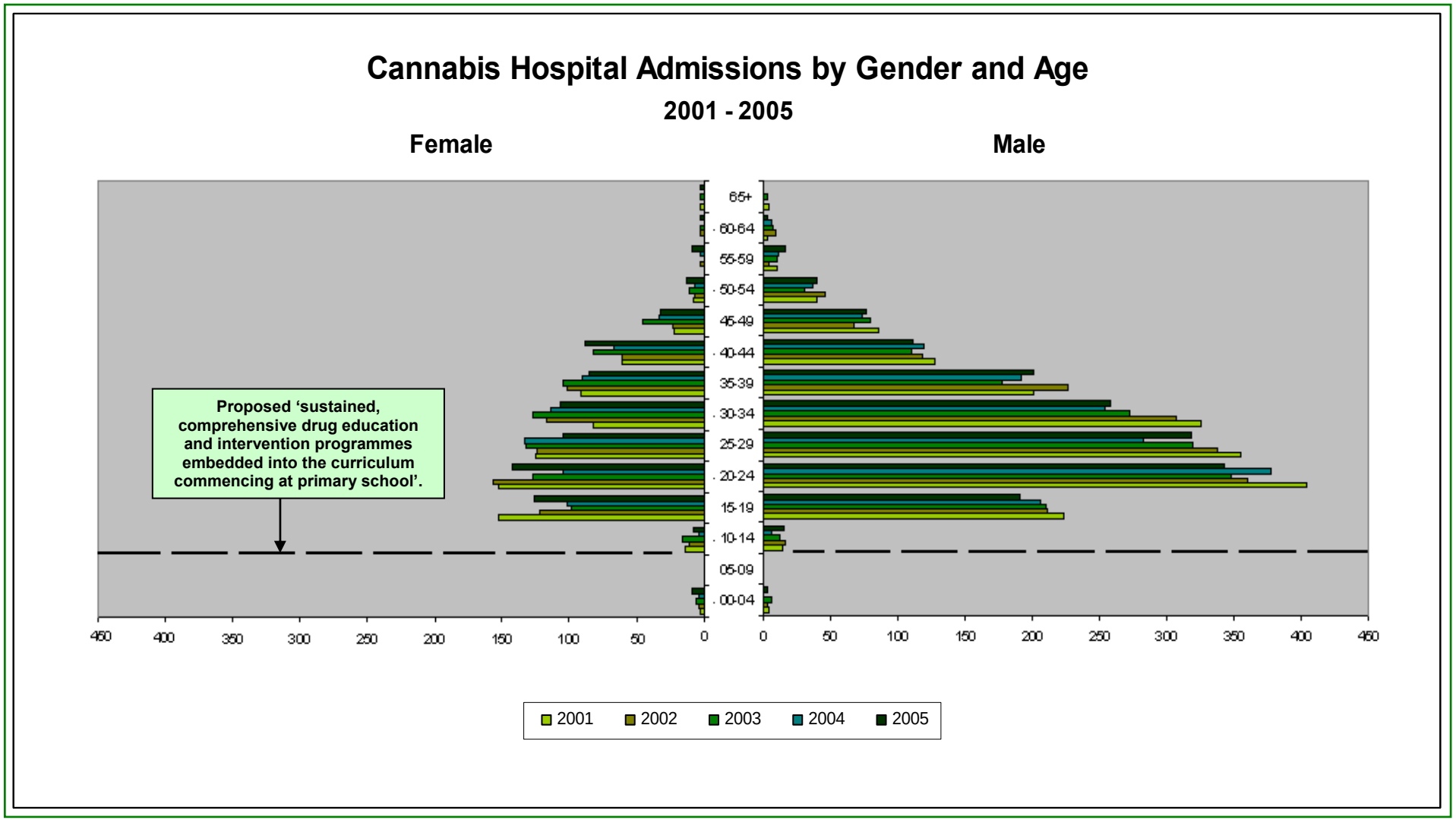


Figure 21: Cannabis Hospital Admissions by Gender and Age

4.2.5 Cannabis Hospital Admissions by Ethnicity

The cannabis hospital admissions by ethnicity combine both primary and secondary diagnoses on a national basis. New Zealand European and New Zealand Maori were each recorded in their own right given the volume of admissions. 'Other' includes collectively other European nationals (approximately 60 admissions per year), Pacific Island nationals including Samoan (approximately 40 admissions per year), Cook Island Maori (approximately 30 admissions per year) and other Pacific Island nationals collectively comprising of approximately 30 admissions per year also. Asian nationals (Indian, Chinese etc.) collectively comprised approximately 20 admissions per year with smaller numbers of Middle Eastern and African nationals recorded.

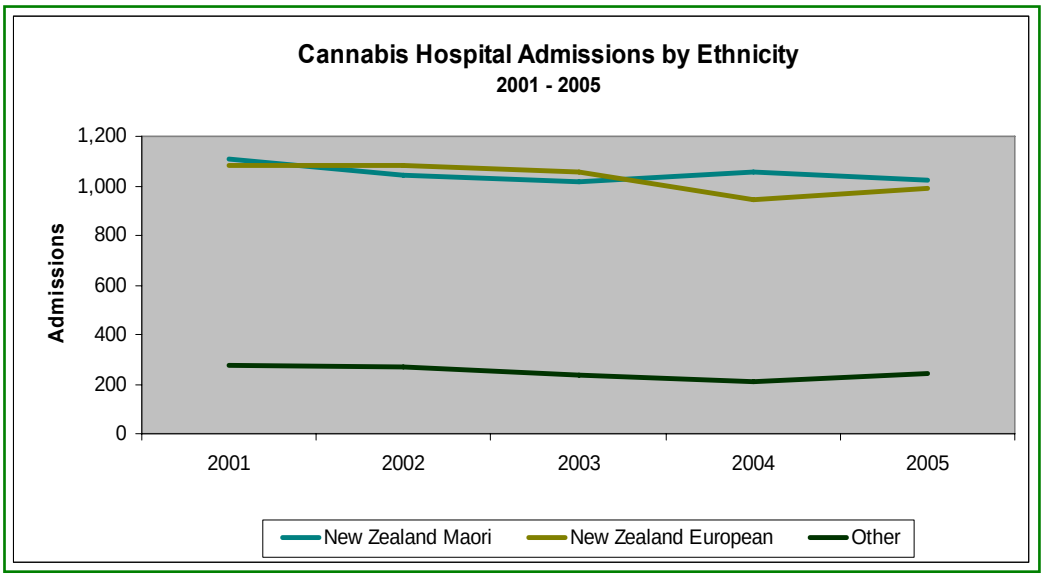


Figure 22: Cannabis Hospital Admissions by Ethnicity – 2001- 2005

Figure 22 above depicts an extremely significant trend. New Zealand Maori represent approximately 15% of the total New Zealand population therefore are significantly over represented in cannabis hospital admissions. In 2001 New Zealand Maori exceeded New Zealand European hospital admissions. In 2002 and 2003 a small reduction in New Zealand Maori hospital admissions resulted in New Zealand Europeans hospital admissions exceeding New Zealand Maori. In 2004 New Zealand European hospital admissions declined by approximately 10% whilst New Zealand Maori increased slightly from 2003. In 2005 New Zealand Maori hospital admissions still exceeded New Zealand Europeans even though both recorded small increases.

The over representation of New Zealand Maori might be explained by a combination of factors reflecting issues with cannabis abuse including:

- The generally lower socio-economic status of New Zealand Maori especially in rural areas within, for example, the Northland and Eastern Districts.

- Cannabis abuse becoming an increasing generational issue and therefore a more accepted part of the social fabric especially in rural areas.
- The prominent role both statistically and anecdotally that Ethnic Gangs and Outlaw Motorcycle Gangs (significant Maori representation) have throughout the cannabis supply chain.

In recent years the New Zealand Police have been criticised for discriminating against New Zealand Maori when policing cannabis. The hospital admission data and other data clearly identifies significant over representation of Maori in cannabis abuse.

4.2.6 Cannabis Hospital Admissions Costs

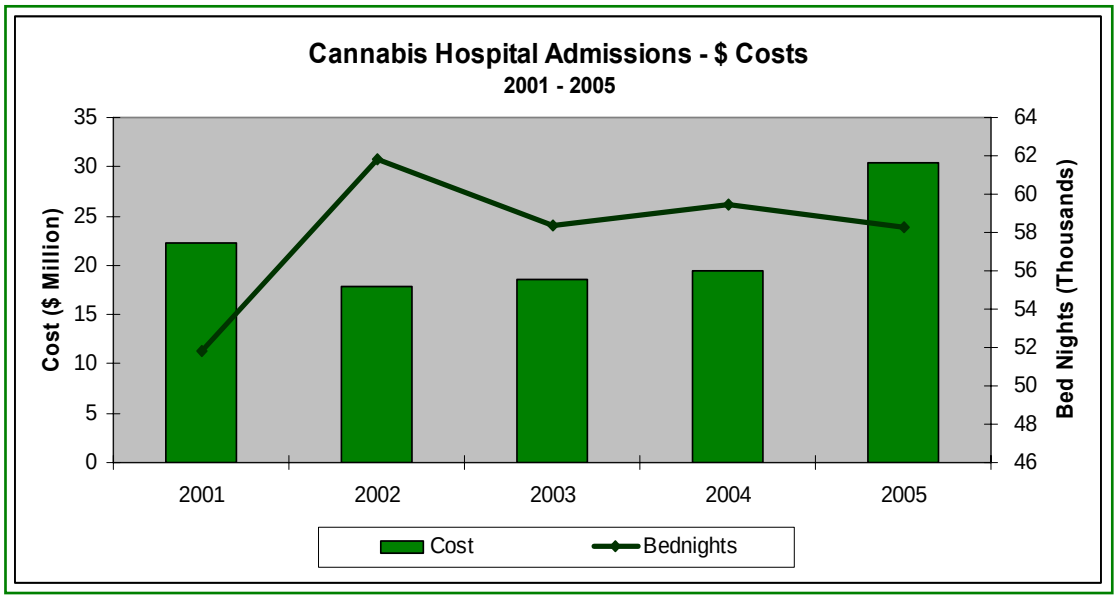


Figure 23: Cannabis Hospital Admissions – $ Costs and Bed Nights – 2001 – 2005

Figure 23 identifies the financial costs of cannabis related hospital admissions. In 2001 expenditure was $22.2 million which fell approximately 20% to $17.8 million in 2002, increased slightly to $18.5 million in 2003 and in 2004 increased by approximately 5% to $19.5 million. In 2005 a substantial increase of approximately 50% was recorded due, in part, to 48 admissions that cost between $100,000 and $370,000 each. In comparison in 2002, 27 admissions cost above $100,000, in 2003, 30 admissions and 2004, 35 admissions which in each year were approximately 20% less than the 2005 admissions costing more than $100,000. The primary diagnosis in 44 of the 48 2005 admissions (costing more than $100,000) related to 'Mental and Behavioural Disorders' with secondary cannabis related diagnoses.

Figure 23 also depicts cannabis hospital admission bed nights that have stabilised at around 58,000 to 59,000 bed nights in 2004 and 2005.

4.3 THE PSYCHO-SOCIAL CONSEQUENCES OF CANNABIS USE IN YOUNG PEOPLE

In 1996 the Ministry of Health[52] documented the major public health risks of regular cannabis use as (in order of importance) dependence, respiratory disease and precipitation or exacerbation of psychosis, especially schizophrenia.

There are a growing number of studies which have found elevated rates of psychosis / psychotic symptoms amongst regular users of cannabis. Estimates suggest that the use of cannabis could account for up to 10% of cases of psychosis.

There are two major longitudinal studies being undertaken in New Zealand which are contributing to the international debate surrounding the medical harms posed by cannabis. The studies are:

- The Christchurch Health and Development Study (Christchurch School of Medicine and Health Sciences).
- The Dunedin Multidisciplinary Health and Development Study.

Both studies have followed the progress of other 1,000 people from birth to at least 25 years of age and both have published extensively on cannabis use and its consequences for young people.

The focus of both studies has been the "*extent to which cannabis use increases risks of psychosis and psychotic symptoms*"[53]. Both studies have found that:

- *"The increasing use of cannabis is associated with the increasing rates of psychotic symptoms' which clearly suggest 'a casual link between the use of cannabis and the development of psychosis"...*

A review of the two New Zealand studies was prepared for and has subsequently been published in the British Medical Journal which identified 'two major conclusions':

- *"The weight of evidence from epidemiological research and neuro-science is consistent with the view that the heavy use of cannabis may encourage the development of psychosis and psychotic symptoms".*
- *"Nonetheless, some uncertainty remains and it would be misleading to conclude dogmatically that cannabis is a cause of psychosis, equally it would be misleading to dogmatically reject this possibility".*

The two New Zealand studies are often cited internationally and were recently highlighted in the United Kingdom Independent newspaper story on *"The Great Cannabis Debate".*

[52] Cannabis, The Public Health Issues 1995 – 1996.
[53] A presentation by Otago University's Christchurch School of Medicine and Health Sciences (Joseph Boden), The Christchurch Health and Development Study; and, the Dunedin Multidisciplinary Health and Development Study.

4.4 CANNABIS DEPENDENCE (ADDICTION)

Dr Ian Oliver[54] identified several international published academic reports that addressed the cannabis dependence issue several of which are highlighted below:

- An Australian National Alcohol and Drug Addiction Centre Report which stated "cannabis dependence is now recognised as an established phenomenon for which people may need to seek medical help"[55]. The study amongst dependent users noted when cannabis use stopped the user experienced "physical withdrawal characterised by loss of appetite and weight, lethargy, irritability, mood changes and insomnia. There is also a psychological craving for cannabis".
- The American Psychiatric Association[56] listed the harmful effects of cannabis which included *"psychotic disorder (insanity), hallucinations, anxiety disorder (panic attacks), impaired judgement, sensation of slowed time, social withdrawal, perceptual disturbances, impaired motor coordination, delirium, memory deficit, depersonalisation, delusions (especially of persecution – paranoia) and disorientation".* These psychiatric symptoms were the cause of numerous admissions to hospital emergency rooms in the United States.
- 'Research published in the United States[57] indicated cannabis use by young people has been associated with a wide range of dangerous and anti social behaviour. Children who begin smoking cannabis at an early age have been found to be statistically less likely to complete their schooling and more inclined to indulge in acts of theft, violence, vandalism and other high risk behaviour when compared with those who do not smoke cannabis'.

In addition, Athol Moffitt, John Malouf and Craig Thompson[58] highlighted two studies of long term users in New South Wales, Australia which noted *"there is now conclusive clinical and epidemiological evidence that heavy cannabis users experience a problem in controlling their use as tolerance develops. Some users suffer a withdrawal syndrome when they abruptly cease using the drug and it is now recognised to be a larger problem than formerly believed".*

4.5 CANNABIS AS A 'GATEWAY' DRUG

Internationally there have been extensive debates about whether cannabis acts as a gateway or stepping stone to other illicit drugs. The Christchurch Health and Development Study identified three conclusions:

- The increasing use of cannabis was associated with clear increases in the risk of subsequent illicit drug use.
- These increases could not be explained by factors known to be related to cannabis.

[54] Drug Affliction – What You Need to Know, Dr Ian Oliver, 2006.
[55] United Kingdom Advisory Council on the Misuse of Drugs 2002 from the Australian National Alcohol and Drug Addiction Centre Report – Dr Jennifer Swift, 1999.
[56] The Diagnostic and Statistical Manual of Mental Disorders (DSM IV, May 1994).
[57] The United States Department of Health and Human Services, "The Risks for Late Adolescents of Early Adolescent Marijuana Use", American Journal of Public Health, 1998 (p93).
[58] Moffitt A., Malouf J. and Thompson C. Drug Precipice, 1998.

- Gateway effects were most marked for young users (<16 years of age) and declined with increasing age.

Three possible explanations for the gateway effects of cannabis were offered:

- These could arise from biochemical changes in the brain that lead cannabis users to be more susceptible to the use of other drugs.
- They could arise from individual learning in which cannabis users learn that cannabis has pleasurable effects and this encourages them to experiment with other drugs.
- These effects could arise from the association of cannabis users with drug dealers.

In summary "…*there is evidence from New Zealand and overseas studies to link cannabis use to a series of adverse outcomes including cannabis dependence, psychosis, mental health problems, gateway effects and respiratory impairment".*

In a recent media statement[59] Professor David Ferguson of Otago University's Christchurch School of Medicine and Health stated the New Zealand research *"had been well received overseas"* but *"it had attracted relatively little attention in New Zealand".*

The policy debate in terms of the legal status of cannabis is therefore clouded when defenders of current policy point to the mounting adverse outcomes identified which is dismissed as inconclusive by those who seek to liberalise cannabis. The overriding impacts of such debates are the confusing mixed messages that are perceived by young people in particular.

[59] The Press (Christchurch), 30 May 2007, "New Zealand has dropped the ball on the cannabis debate".

5.0 CANNABIS SUPPLY

5.1 THE CHARACTERISTICS OF CANNABIS SUPPLY IN NEW ZEALAND

5.1.1 Market Development

Cannabis is believed to have first appeared in New Zealand during the 2nd World War and used by American servicemen stationed here. During the 1950's there was limited use amongst some New Zealand musicians. All of the cannabis used at this time was imported.[60] During the 1970's the "Mr Asia" syndicate commenced operations importing cannabis from South East Asia, evolved to the importation of substantial quantities concealed within yachts (amongst other means) before diversifying into the importation of heroin.

It cannot be established when the first recorded cultivation of cannabis offence was recorded by the New Zealand Police[61]. In any event cannabis cultivation is now widespread throughout all Police Districts in New Zealand. In addition, New Zealand is now self-sufficient in the cultivation and production of cannabis including cannabis oil which has largely replaced imports of cannabis resin. Importation of cannabis is therefore no longer common, certainly for larger quantities.

The New Zealand cannabis industry went through radical changes in the early 1990's with the onset of indoor cultivation in which strong yielding high THC strains (seeds) were imported because of their superior genetic structure. New Zealand has many professional and amateur cannabis cultivators who have become increasingly proficient and all now favour female clones from a proven strain. In addition, outdoor cannabis cultivation is now a far more discerning practice in which optimum soil conditions, sunlight and irrigation is sought.

New Zealand cannabis consumers have therefore become, in many cases, pedantic and discrete connoisseurs of cannabis with an increasing preference toward securing cannabis from sophisticated indoor operations because a consistently higher quality product is achieved with high levels of THC.

5.1.2 Forms of Cannabis Sold in New Zealand

There are three main forms or grades of **cannabis head/leaf** sold in New Zealand[62]:

- The highest grade comes from the non pollinated and therefore un-seeded (seedless) head of the female cannabis plant. In New Zealand this grade of cannabis is often referred to as 'primo'. The term 'head' refers to the flowering head of the cannabis plant that is the most sought after as it contains the highest level of THC.

[60] Cannabis in New Zealand 2000, A Profile Prepared by the National Drug Intelligence Bureau.
[61] Ibid.
[62] Detective Sergeant John Sowter, Auckland Metro Crime and Operations Support (AMCOS).

- The second grade of cannabis is the seeded head of a female cannabis plant and is commonly referred to as 'seeded head'. This grade is less desirable because of the presence of the seeds.
- The lowest grade of cannabis is the cannabis leaf material from the cannabis plant which is commonly referred to as 'leaf' or 'cabbage'. This part of the cannabis plant is almost worthless and is generally only used to mix with 'head' material to increase the weight of the product being sold or is used in the production of cannabis oil.

Persons involved in the sale and distribution of cannabis in nearly all occasions deal in the un-seeded head of the female cannabis plant. In addition, cannabis consumers demand the highest graded seedless head. There is little or no market for seeded head.

Cannabis Oil is encountered throughout New Zealand and is almost exclusively domestically manufactured. In 2006 2.405 kilograms of cannabis oil was seized nationally of which 1.951 kilograms was seized in the Central District. There are many methods used to manufacture cannabis oil. The simplest method involves soaking cannabis in a container of isopropyl alcohol. After several hours the cannabis plant material is removed, the isopropyl alcohol has evaporated leaving thick deposits of cannabis oil in the container.

Cannabis Resin is no longer a significant issue in New Zealand as a consequence of domestically manufactured cannabis oil. In 2006, 94. 5 grams was seized nationally.

Cannabis Seeds are widely encountered throughout New Zealand. In 2006 138,525 cannabis seeds were seized nationally comprising 264 seizure incidents. Although there is a strong correlation to the Police Districts in which cannabis plants and cannabis leaf were seized there were no other significant trends apparent.

In terms of cannabis oil, cannabis resin and cannabis seeds there were no additional significant national trends observed therefore, for the purposes of this assessment, no further analysis was undertaken.

5.1.3 Cannabis Supply Chains

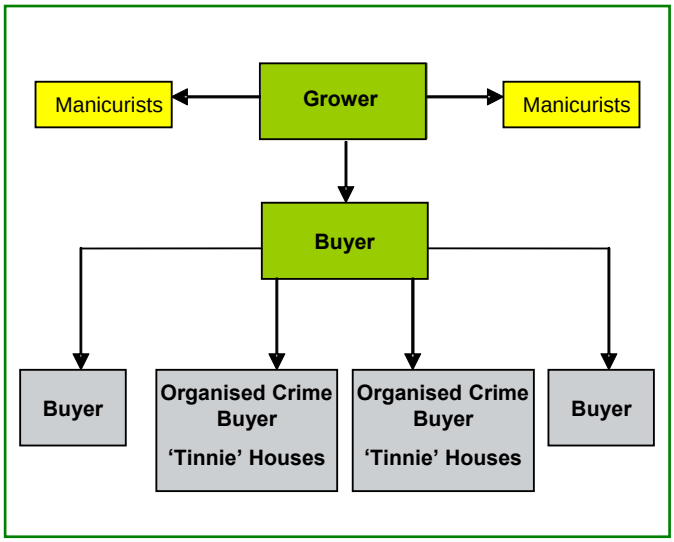


Figure 24: Cannabis Supply Chain

Figure 24 depicts a typical cannabis supply chain focussed at the source of supply but is not a model that could be universally applied across New Zealand.

Generally a cannabis grower or cultivator uses one trusted cannabis buyer or a small select group of trusted cannabis buyers. The cannabis grower and / or buyer(s) might also be an organised crime member (Outlaw Motorcycle Gang or Ethnic Gang), associate or is connected to an organised crime group.

It is not uncommon for a cannabis grower to be contracted by an organised crime group to produce a certain quantity of cannabis. Organised crime groups are therefore represented at each of the levels depicted in the cannabis supply chain. An example of the manner in which an organised crime component might be under reported is during District intelligence phases of the 'National Cannabis and Crime Operation'. Information might be received that a particular plot under cultivation is being grown on behalf of an organised crime group. If no offenders are arrested as a consequence of the plot being eradicated or recovered the intelligence attributing the plot to an organised crime group is not formally recorded.

5.1.4 "Tinnie Houses"

Approximately ten years ago 'tinnie' houses emerged as a means to distribute and conduct sales of cannabis to consumers. Today, every Police District, almost every city, town or community in New Zealand have 'tinnie' houses, which are usually in private dwellings. The sale is usually conducted in face to face transactions but there are also recordings of transactions being conducted by use of a small slot in a door (or similar arrangement) where money and cannabis is exchanged. To minimise loses relatively small amounts of cannabis or cash are maintained at these premises[63]. The targeting and policing of 'tinnie' houses has been problematic in all Police Districts, however, there have been recent examples of successful operations.

In 2005 / 2006 Operation WEAKEN, coordinated by the Counties Manukau District, targeted the 'Black Power' Ethnic Gang who were responsible for the large scale distribution and sale[64] of cannabis from a 'tinnie' house in South Auckland which operated 24 hours per day. Operation WEAKEN was terminated in March 2006 resulting in

[63] Cannabis in New Zealand 2000, A Profile Prepared by the National Drug Intelligence Bureau.
[64] There was an average of 175 sales per day ($20 per 'tinnie') during daylight hours identified. Therefore $3,500 per day was collected which equates to $1,200,000 per year through cannabis sales.

the arrest of fifteen offenders, the seizure of 90 kilograms of cannabis, 200 cannabis plants and over $30,000 in stolen property recovered. In addition, nearly $750,000 in assets was frozen using Proceeds of Crime legislation.

5.1.5 Cannabis Prices in New Zealand

Table 1 and Table 2 depict the units and quantity in which cannabis is sold and the price of cannabis for each Police District. This information has been obtained from the 2006 Operation OUTCOME initiative[65] coordinated by the NDIB following the 2006 New Zealand Police Heads of Districts Drugs Conference.

Table 1: Cannabis Unit / Quantity Information

Unit of Use or Sale	Quantity
Roach	0.1g
Joint / Cigarette	0.4g
Bullet / Foil / Tinnie (2-3 joints)	1g
3 x Heads	2g
'50 Bag' or '$50 bag'	3g
Buds / Head / Fruit	3.3g
Seedless Head – One Ounce Bag	1oz = 28.4g
Seedless Head – One Pound Bag ('LB' or 'Elbow')	1lb = 454.6g

Table 2: Cannabis Regional Price Information

Region	Foil / Tinnie	$50 Bag	Ounce Bag (Seedless Head)	Pound Bag (Seedless Head)	Pound Bag (Cabbage)
Northland	$20		$250-$350	$2500-$4000	$100-$300
AMCOS	$20-$25		$300-$400	$3000-$5000	
Waitematä	$20-$30				
Counties / Manukau	$20-$30		$250-$400	$3000-$4000	
Central – Hawera	$20-$25		$250-$350		
Eastern – Hastings	$20-$25		$250-$400	$3500-$5000	
Wellington	$20		$250-$350	$3500-$4000	
Bay of Plenty					
Tasman – Blenheim	$20-$25	$50-$100	$250-$400	$3500-$5000	$100
Canterbury	$20	$50	$250-$320	$2500-$4500	
Southern	$15-$25	$50	$200-$400	$2500-$5000	

5.1.6 Estimated Value of the Cannabis Market

In recent years several estimates of the value of the illicit market for cannabis in New Zealand have been undertaken (academic, non academic and law enforcement) using both supply and demand approaches.

1. In 1998 the annual total dollar value of the illicit market in cannabis (demand approach) was estimated to be *$81,300,000 to $104,600,000 at the wholesale level* and *$131,100,000 to $168,900,000 at the retail level* based on cannabis consumption data from the 1998 New Zealand Drug Use Survey.

[65] The Northland and Bay of Plenty Districts did not contribute to 2006 Operation OUTCOME.

In 2005[66] 'the annual total dollar value of the illicit market for cannabis (demand approach) in New Zealand' was estimated to be ***$74,100,000 to $95,300,000 at the wholesale level*** and ***$182,800,000 to $235,000,000 at the retail level*** based on cannabis consumption data from the 2003 Health Behaviours Survey; Drug Use.

The prevalence data used in both 1998 and 2003 surveys were very similar, however, 'the rise in the dollar value of the cannabis market was largely due to an increase in the population aged 13-45 years and therefore a subsequent increase in the total number of last year cannabis users and the total quantity of cannabis consumed from 10,246.380 kilograms in 1998 to 14,857.470 kilograms in 2003'.

2. In 2001 a national estimate of the cannabis black market (supply approach) was undertaken based on the average number of cannabis plants seized by the Police during cannabis recovery / eradication between 1993 and 1998 (212,000) using eight ounces (227.2 grams) as a yield and alternative prices paid per pound of $2,000 and $4000 which valued the recovered / eradicated cannabis plants between ***$212,000,000 to $424,000,000***. A cannabis seizure rate of 33% is assumed therefore the seizure values are multiplied by three to arrive at market valuations between ***$636,000,000 and $1,270,000,000***[67]. This figure was disputed by the authors of example one, above, who noted the number of cannabis plants recovered / eradicated by Police was wrongly included.

3. In 1998 the supply side approach was used to estimate the value of cannabis plants cultivated in the Northland District based on the number of cannabis plants recovered / eradicated by Police in 1996 (70,478 cannabis plants). Three estimates of the price paid for an ounce of cannabis was used ($2,000, $4,000 and $6,000) and three estimates of the yield (2 ounces, 8 ounces and 1 pound). The value of Northland District cannabis plants recovered / eradicated therefore ranged from ***$18,000,000 to $70,000,000***.

4. In 2002 the New Zealand Customs Service[68] estimated (demand approach) there were 250,746 current cannabis users[69], estimated a very conservative consumption rate of 2 joints (1 gram) per month which equalled 3,009 kilograms. Assuming ounce deals (28.4 grams) were applied this would equate to 105,950 ounces and at $274 per ounce[70] equals ***$29,030,300***. Assuming 'tinnie' deals (1.5 grams) at $20 per 'tinnie' this would equate to ***$40,120,000***.

[66] Wilkins C and Sweetsur P, The Illicit Market for Cannabis in New Zealand: Dollar Value and Structure of the Black Market, 2005, Centre for Social and Health Outcomes Research and Evaluation, Massey University.
[67] Wilkins C, Bhatta K and Casswell S, A 'Demand Side' Estimate of the Dollar Value of the Cannabis Black Market in New Zealand, Drug and Alcohol Review (2002), Alcohol and Public Health Research Unit, University of Auckland, from Cannabis Prohibition: Taking Stock of the Evidence, K. Dawkins, Otago Law Rev, 2001.
[68] Williamson S, Project HORIZON Outcome Report Review of Customs Drug Enforcement Strategies, 2002.
[69] Based on New Zealand Drug Use Survey statistics, 1998 and 2001.
[70] Based on the most popular form of sale and price for cannabis identified in the 2003 New Zealand Health Behaviours Survey – Drug Use.

It is apparent that what ever method is used to calculate the estimated size of an illicit drug market it will always include an element of inaccuracy as illicit drug markets are clandestine in nature.

Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982.

To place the estimated size of the illicit market for cannabis into context a comparison could be made to the '$704,200,000 (legal) market for tobacco products and the $1,594,100,000 (legal) market for alcohol'[71].

5.1.7 Purity of Cannabis – Institute of Environmental Science and Research (ESR)

The last Institute of Environmental Science and Research (ESR) analysis[72] conducted on the potency of New Zealand cannabis female flowering heads, cannabis leaf, cannabis oil and cannabis resin was undertaken between 1976 and 1996 and published in June 1998.

The ESR studies concluded that there had been no significant increase in the average potency of cannabis oil, cannabis female flowering heads or cannabis leaf over the previous twenty years but did note there was potential for an increase in potency if more growing operations were forced indoors in light of the emerging hydroponically grown cannabis trend.

The potency of cannabis is determined by the level of THC and is expressed as a percentage of the dry weight of the product. The THC content is principally dependent on the genetic origins of the seed but may vary in different parts of the plant during different periods of the plant growth and may also be affected by the environmental conditions. The THC content of cannabis leaf is usually lower than the female flowering heads.

There are three current ESR and New Zealand Police research and analysis initiatives. One initiative (Operation REAP) has recently been concluded and is soon to be published.

5.1.7.1 Withheld under Section 6 (C) of the Official Information Act 1982

[71] Wilkins C and Sweetsur P, The Illicit Market for Cannabis in New Zealand: Dollar Value and Structure of the Black Market, 2005, Centre for Social and Health Outcomes Research and Evaluation, Massey University.
[72] The Potency of Cannabis in New Zealand from 1976 to 1996, H. A. Poulsen and G. J. Sutherland, Institute of Environmental Science and Research - The Forensic Science Society, 2000.

5.1.7.2 Genetic Variability of Cannabis

During 2005 ESR submitted a proposal to the Forensic Operational Research Fund which is jointly funded by ESR and the New Zealand Police in relation to the genetic variability of cannabis.

The objective of the research was to examine the potential of using DNA profiling of cannabis as a tool in the investigation of drug related offences in New Zealand.

The development of such an analytical tool will enable Police to differentiate or link small seizures to larger cannabis growing operations through DNA profiling of the plant material.

5.1.7.3 THC Levels in Cannabis Plant Material

The 2007 and 2008 round of the Forensic Operational Research Fund includes a proposal to ascertain the current level of THC in seizures of cannabis plant material grown in New Zealand and submitted to ESR for analysis.

In submitting the proposal it was noted that the only data available on the potency of cannabis plant material grown in New Zealand is the work carried out by ESR between 1976 and 1996.

5.2 SUPPLY CONTROL

5.2.1 Police National Cannabis Recovery Operations / National Cannabis and Crime Operation

Cannabis recovery operations commenced in New Zealand in the late 1970's and by the early 1980's had evolved into an 'Annual National Cannabis Recovery Operation', coordinated by the NDIB, involved most Police Districts, utilised fixed wing aircraft and was supported by a helicopter.

Table 3 below depicts the number of cannabis plants seized during the 'National Cannabis Recovery Operation' for the years 1990 to 1998[73].

Table 3: New Zealand Police 'National Cannabis Recovery Programme' 1990 – 1998

1990	1991	1992	1993	1994	1995	1996	1997	1998
147,273	141,986	214,371	215,819	204,702	218,000	213,991	142,288	187,577

Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982.

In the 2001 / 2002 financial year Commissioner Rob Robinson acknowledged the correlation between drug offending and property and violent offending. The 2002 five year Strategic Plan included a key priority area 'Reduce Organised Crime'. A review of the 2002 / 2003 'National Cannabis Eradication Programme' resulted in a number of recommendations that resulted in the programme being renamed the 'National Cannabis and Crime Operation' which was refocused to enable more emphasis on the apprehension of offenders involved in commercial cultivation and distribution and asset forfeiture in particular.

[73] In 1994 the budget for the National Cannabis Recovery Operation was approximately $800,000.

Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982.

In 2002 the University of Auckland, Alcohol and Public Health Research Unit assessed the 'effectiveness of cannabis crop eradication operations in New Zealand'[74] by estimating the seizure rate achieved by the (then) National Cannabis Eradication Programme in 1998 using a methodology that included an average yield factor of two ounces per cannabis plant[75].

- The total quantity of cannabis consumed in New Zealand was estimated to be 11.7 to 15.1 million grams.
- Based on a yield of two ounces per plant the total amount of cannabis consumed would be the equivalent of 209,000 to 270,000 female cannabis plants.
- This figure was doubled to 418,000 to 540,000 plants based on an equal number of male cannabis plants cultivated but not consumed.
- The New Zealand Police destroyed 187,577 cannabis plants in 1998. Therefore, the seizure rate achieved by the 1998 National Cannabis Eradication Programme was estimated to be between 26% and 31%.

The modest cost[76] identified for the 1998 'National Cannabis Eradication Programme' led to speculation about the role the programme could play in more effective supply reduction if the budget was doubled or tripled and the impact that might make on the availability and price of cannabis. Several factors were identified as 'working against the effectiveness of an expanded programme' which included a 'switch to indoor hydroponics cultivation as outdoor cultivation becomes more vulnerable'.

A review of the 2002/2003 'National Cannabis Eradication Programme' resulted in a number of recommendations that included the programme being renamed the 'National Cannabis and Crime Operation' which was refocused to enable more emphasis on the apprehension of offenders involved in the commercial cultivation and distribution of cannabis and asset forfeiture. The allocation of aerial support resources were based on cannabis plant eradication results and the development of quality intelligence.

Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982.

[74] Wilkins C, Bhatta K and Casswell S, The Effectiveness of Cannabis Eradication Operations in New Zealand, Drug & Alcohol Review,2002.
[75] Walker L, Cocklin C and Blunden G, Cannabis Highs and Lows: University of Auckland, Department of Geography, 1998. This figure was noted as broadly consistent with ESR data on the yield achieved from immature cannabis plants and first-hand accounts from cultivators in New Zealand and Australia yet is conservative when compared to the average yields used in outdoor cannabis cultivation in New Zealand.
[76] Based on a $1,200,000 estimate from an unnamed source.

The operation within each District is intelligence driven therefore allocation of flying time is based on the development of quality intelligence.

The National Cannabis and Crime Operations have evolved significantly since the 1990's. The operation now has a much wider criminal offending focus and, where possible, involves other government agencies under the Combined Law Agencies Group (CLAG) umbrella such as the Inland Revenue Department Special Audit group.

The statistics[77] illustrated in table 4 below are reliant upon the accuracy of data provided to the National Bureau of Investigation Support (NBIS) Cannabis and Crime Operation coordinator from each of the Districts.

Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982.

The National Cannabis and Crime Operation is widely acknowledged across Government agencies as a highly successful operation achieving significant results.

[77] The 2007 National Cannabis and Crime Operation Debrief identified issues with some Districts not formerly reporting cannabis plants either recovered or eradicated in the form of an *Drugs.

Table 4: 2005 and 2006 National Cannabis and Crime Operation Results[78]

Police Districts	Plants		Plots		Offenders Arrested		Charges Laid		Gang Members Arrested		Arms[79]		Proceeds Of Crime		Estimate Property Recovered	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Northland	48,625	41,403	162	126	93	42	164	43	13	7	15	12	2	2	$128,800	$20,000
Waitematä	0	0	0	0	0	0	0	0	3	0	0	0	0	0	$0	$0
Auckland	1,382	1,420	53	26	10	2	83	0	0	0	0	0	0	0	$0	$5,000
Counties	0	0	0	0	0	0	0	0	3	0	0	0	0	0	$0	$0
Waikato	13,151	13,550	357	40	161	101	194	154	20	10	12	9	2	0	$0	$9,665
BOP	22,468	18,961	305	496	57	70	65	134	20	13	4	9	0	2	$76,000	$44,200
Eastern	3,222	14,672	0	285	40	28	51	33	6	0	0	11	0	1	$640	$2,300
Central	3,918	10,701	77	134	29	102	45	607	0	0	0	8	0	0	$4,550	$5,001
Wellington	0	0	0	919	0	34	0	0	3	0	0	0	0	0	$0	$0
Tasman	11,909	13,132	236	389	130	105	471	661	8	14	11	1	2	3	$16,800	$20,001
Canterbury	3,332	2,294	90	83	41	45	69	56	11	5	3	3	2	0	$10,799	$0
Southern	193	1,405	10	11	3	4	82	380	0	1	0	0	0	0	$0	$0
Total	**108,200**	**118,457**	**1,290**	**1,590**	**564**	**499**	**1,224**	**2,068**	**87**	**50**	**45**	**53**	**8**	**8**	**$237,589**	**$106,167**

In addition to the above statistics the following seizures were made[80]:

	2005	2006
• Cannabis head/leaf	75 kilograms	77 kilograms
• Methamphetamine clandestine laboratories	5	9
• Methamphetamine	12 grams	48 grams
• Pseudoephedrine tablets	335	330
• Heroin	1 gram	
• MDMA		63 tablets

[78] The statistics are reliant upon the accuracy of data provided by each Police District.
[79] Includes shotguns, rifles and handguns but not ammunition.
[80] In 2005 a total of 251 Search Warrants and 112 Search Without Warrants were executed nationally. In 2006 a total of 206 Search Warrants and 138 Search Without Warrants were executed nationally.

5.2.1.1 National Cannabis and Crime Operation – Recent Trends

- Since 2003 / 2004 there has been a progressive movement toward the cultivation of cannabis comprising almost exclusively of cloned female cannabis plants.
- The use of cloned female plants are generally started off indoors, moved to outdoor locations to conclude cultivation which guarantees high quality cannabis plants that provide maximum yields. The cannabis plants are sometimes grown in large planter bags that are moveable so they can be pulled under a natural canopy of bush and scrub to avoid Police detection from the air.
- An increasing number of cannabis cultivation operations have been identified using enhanced cultivation techniques in terms of the use of cloned starter plants, nitrogen rich fertilisers, irrigation systems (drip lines) and pesticides to achieve higher yields, higher THC content[81] and a shorter growing time.
- Confidential information sources allege indoor plants have become too high in THC therefore the cannabis plants are placed outside to reduce the THC content enabling the consumer to experience a much smoother smoke.
- It is likely some cannabis cultivators are employing staggered plantings and are therefore achieving an early harvest (accepting reduced yields) and a late harvest (achieving higher yields). The Northland District in particular and other northern North Island Districts are likely to be experiencing this trend.
- An increasing movement toward single cannabis plants being cultivated in long lines which can extend over ridges / hills. This modus operandi is being employed specifically to evade Police detection.
- Cannabis cultivators continue to utilise privately owned forestry land blocks, Department of Conservation land and private farms contracted to grow maize crops. The continued development and enhancement of relationships with industry sectors at a National and District level is therefore a priority.

5.2.1.2 Withheld under Section 9 (2) (g) (i) of the Official Information Act 1982

[81] The United States Department of Justice, National Drug Intelligence Centre – 'Domestic Cannabis Cultivation Assessment 2007 identifies outdoor cannabis cultivation achieving a THC content of between 8% and 12%.

5.2.1.3 Withheld under Section 6 (C) of the Official Information Act 1982.

5.2.2 Police District Cannabis Plant Seizures 2006

This section deals with seizures of cannabis plants *excluding* cannabis plants eradicated or seized by Districts during the 2006 National Cannabis and Crime Operation.

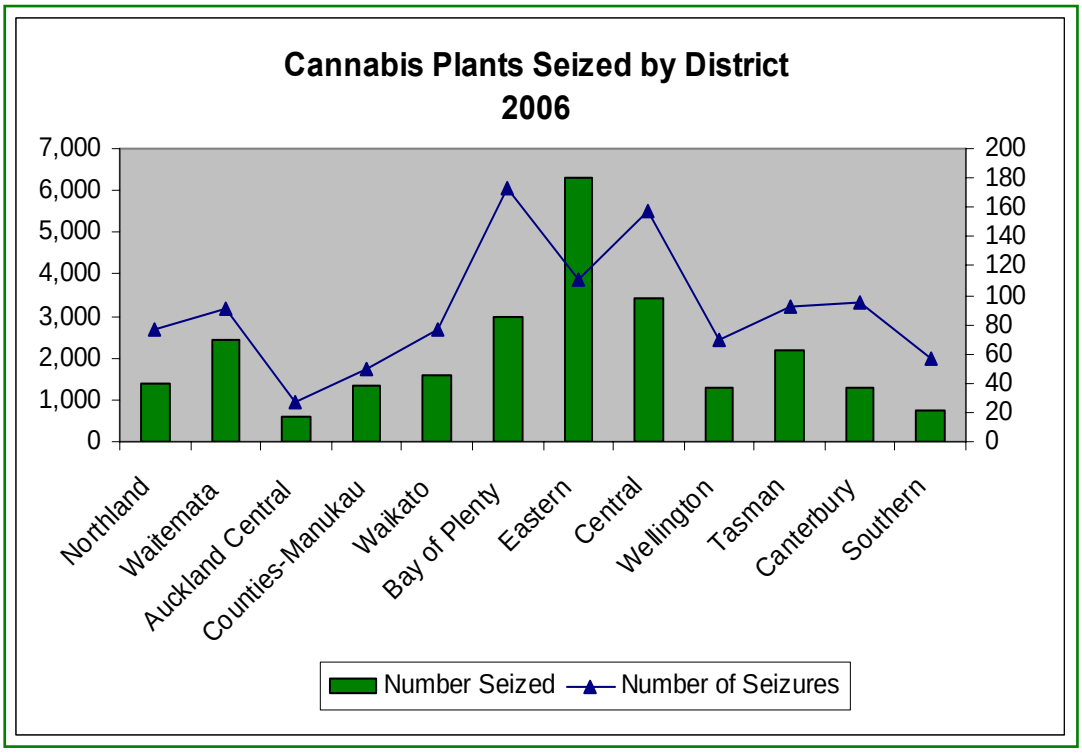


Figure 26: Cannabis Plants Seized by Police District

Figure 26 depicts seizures of cannabis plants by Police District. There were 1,075 separate seizure incidents of cannabis plants nationally involving 25,582 cannabis plants. The 'Top 5' ranking for the highest number of cannabis plants seized by Police District is as follows;

1. Eastern District – 6,323 cannabis plants in 111 seizure incidents.
2. Central District – 3,439 cannabis plants in 158 seizure incidents.
3. Bay of Plenty District – 3,001 cannabis plants in 173 seizure incidents.
4. Waitematä District – 2,493 cannabis plants in 91 seizure incidents.
5. Tasman District – 2,160 cannabis plants in 92 seizure incidents.

In contrast to the above ranking the most seizure incidents by District was Bay of Plenty followed by Central and Eastern Districts (in effect reversing the first three ranked above) who were followed by the Canterbury and Tasman Districts.

Significantly, during the 2006 National Cannabis and Crime Operation the Eastern and Central Districts achieved significant increases in cannabis plants eradicated / recovered in comparison to the 2005 National Cannabis and Crime Operation (increases of approximately 400% and 200% respectively). The Bay of Plenty and Tasman

Districts were also prominent, however, the Northland District traditionally eradicate / recover the largest number of cannabis plants.

Figure 26 below depicts the number and percentage of cannabis plants seized in each seizure incident.

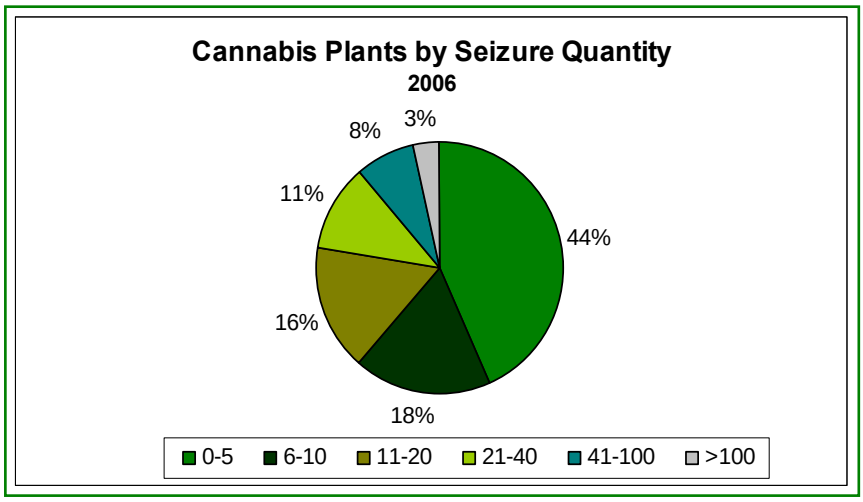


Figure 27: Cannabis Plants by Seizure Quantity

As depicted 44% of seizure incidents (465) involved 5 cannabis plants or less. Many of these incidents involved Police investigating other criminal offending which resulted in the seizure of cannabis plants.

Collectively, 34% of seizure incidents (368) involved between 6 and 20 cannabis plants and 22% of seizure incidents (242) involved 20 or more cannabis plants in commercial cannabis cultivation operations.

5.2.2.1 Cannabis Plants – Cultivation Method

Establishing the cultivation method and determining whether the cannabis plant(s) had been seized from an outdoor or indoor facility was problematic. The NZP Drug Search and Seizure Form does not provide fields to capture this data therefore all 1,075 cannabis plant Drug Search and Seizure Records were interrogated manually. In many cases the cultivation method information sought was not documented which required the assistance of Districts.

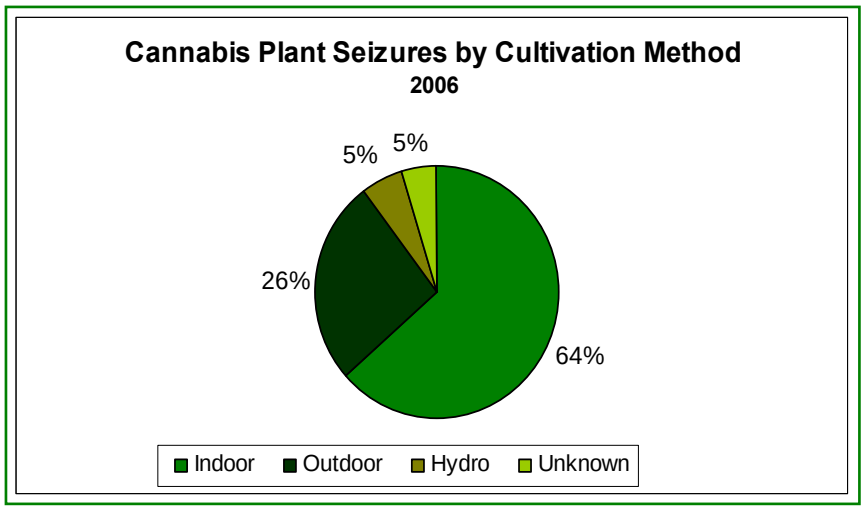


Figure 28: Cannabis Plant Seizures by Cultivation Method

Figure 28 illustrates that 64% of cannabis plant seizure incidents (680) were from indoor soil cultivation which is generally a reflection of Police undertaking routine inquiries or investigations into other offending rather than specific targeted cannabis related investigations. Outdoor cultivation represented 26% of seizure incidents (284). Only 5% of seizure incidents (59) involved hydroponics operations reflecting a preference for indoor and outdoor soil cultivation. This is likely to reflect the skills required, the difficulty and challenges in operating a successful hydroponics operation and that comparable quality cannabis is being achieved in indoor soil cultivation.

5.2.2.2 Cannabis Cultivation by Police District

Figure 29 below depicts cannabis cultivation by Police District which has been analysed by numbers of cannabis plants in an effort to identify discernable trends between Districts.

Indoor hydroponics operations were most prolific within the Waitematä District (12 seizure incidents) which was almost level with outdoor sites (14 seizure incidents). The Wellington District followed with 8 seizure incidents involving indoor hydroponics operations which compared with 10 seizure incidents involving outdoor sites. The Central District had 7 seizure incidents involving indoor hydroponics operations but also had a much higher percentage of outdoor sites (53 seizure incidents).

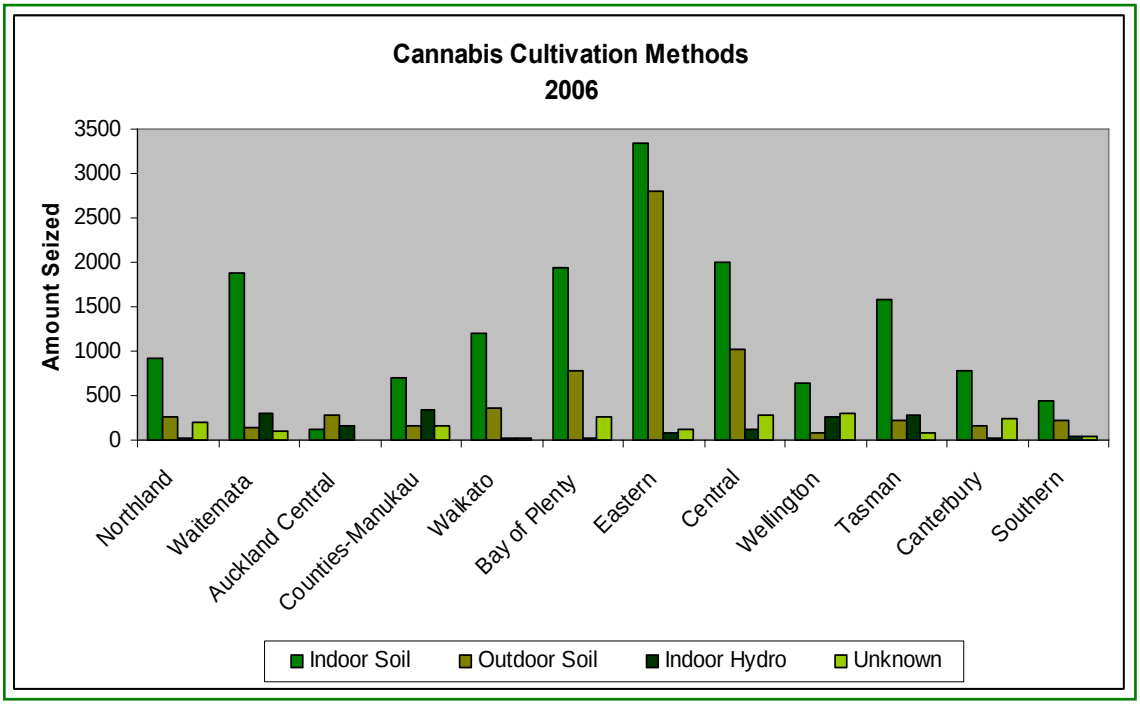


Figure 29: Cannabis Cultivation Methods – Number of Cannabis Plants Seized

It is also apparent the Eastern District is achieving far greater seizures of cannabis plants per seizure incident for both indoor soil and outdoor sites which possibly reflects higher prevalence of cannabis and the higher level at which investigations are targeted against the supply chain.

Whilst nationally outdoor cultivation is the most favored method of cultivation, the larger city environments are perhaps more likely to attract indoor hydroponics operations.

5.2.3 Police District Cannabis Head / Leaf Seizures 2006

Figure 30 below depicts seizures of cannabis head / leaf (already harvested when seized) by Police District in 2006. There were 3,545 separate seizure incidents of cannabis head / leaf nationally involving 674.944 kilograms. The largest seizure incident (186 kilograms) occurred in the Bay of Plenty District.

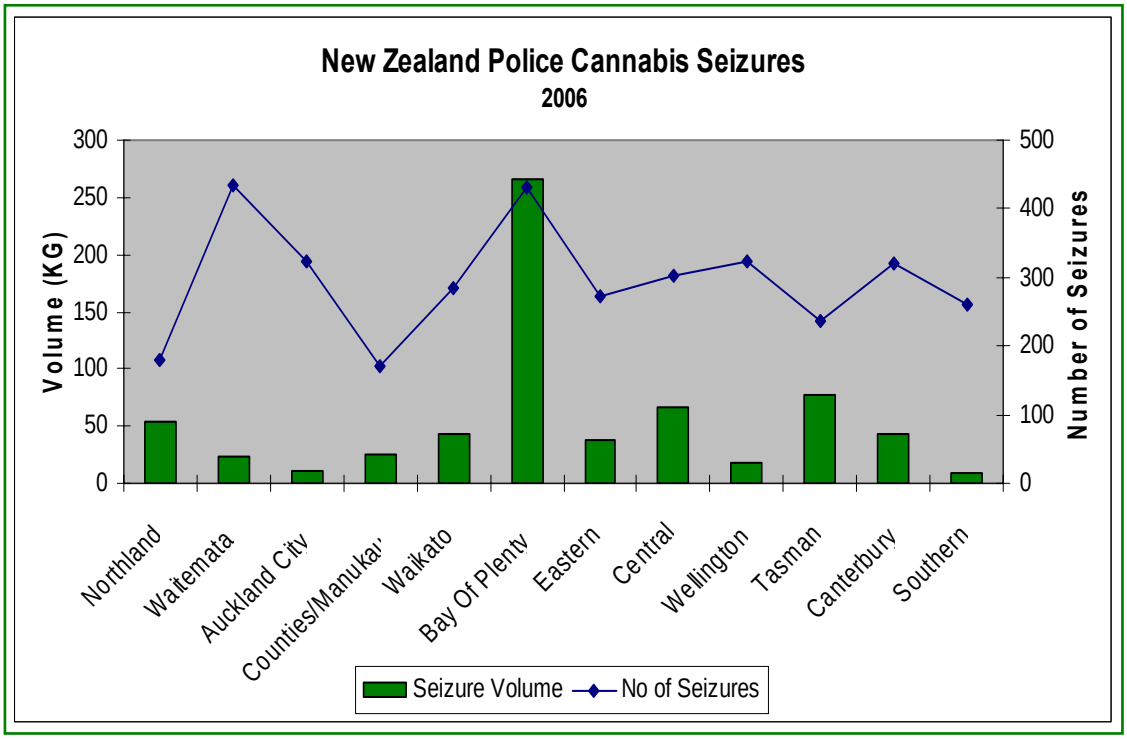


Figure 30: New Zealand Police 2006 Cannabis Seizures

The 'Top 5' ranking for the largest amounts of cannabis leaf seized by Police Districts is as follows:

1. Bay of Plenty District – 266.409 kilograms (39% by weight) in 430 seizure incidents (12%).
2. Tasman District – 76.889 kilograms (11% by weight) in 237 seizure incidents (7%).
3. Central District – 65.999 kilograms (10% by weight) in 303 seizure incidents (9%).
4. Northland District – 53.489 kilograms (8% by weight) in 179 seizure incidents (5%).
5. Canterbury District – 43.960 kilograms (7% by weight) in 319 seizure incidents (9%).

In contrast to the above ranking the most seizure incidents by District was the Bay of Plenty District followed by Wellington (18,759 kilograms and 324 seizure incidents) Canterbury, Central and Waikato Districts (42,830 kilograms and 285 seizure incidents).

Figure 31 below depicts the percentage of cannabis leaf seized by quantity or weight.

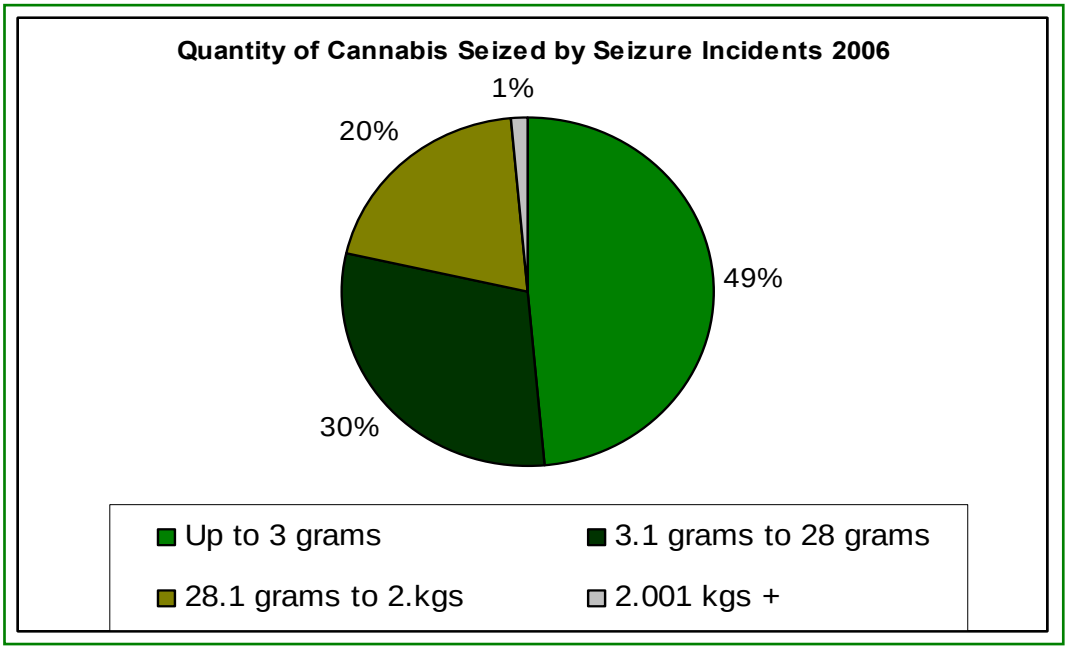


Figure 31: Quantity of Cannabis Seized by Seizure Incidents

Forty-nine percent (49%) of seizure incidents (1,724) involved amounts up to 3 grams which include 'tinnies' and '$50 bags'. In contrast, 21% of seizure incidents (756) involved amounts of more than 28 grams (one ounce bags). There were 48 seizure incidents (1%) involving more than 2,001 kilograms.

Nationally, the average quantity seized per seizure incident was 190.3 grams.

5.3 IN WHICH POLICE DISTRICTS IS CANNABIS THE MOST PROLIFIC?

Table 6 below uses the indicators of the Ministry of Health cannabis related hospital admissions together with the National Cannabis and Crime Operation data and Police District cannabis seizure data to collectively assist in identifying the Police Districts in which cannabis is the most prolific.

Table 6: Status of Cannabis by Police District

	Hospital Admissions 2001 – 2005	National Cannabis and Crime Operation 2006	Cannabis Plants 2006	Cannabis Leaf 2006
1	Eastern District	Northland District	Eastern District	Bay of Plenty District
2	Northland District	Eastern District	Central District	Tasman District
3	Waikato District	Waikato District	Bay of Plenty District	Central District
4	Bay of Plenty District	Tasman District	Waitematä District	Northland District
5	Central District	Central District	Tasman District	Canterbury District

- Cannabis is therefore a more significant issue in the following Police Districts:[82]

  - Bay of Plenty District
  - Eastern District
  - Northland District
  - Central District
  - Tasman District
  - Waikato District

5.4 ORGANISED CRIME IN THE SUPPLY CHAIN

Organised crime involvement in the cannabis supply chain is a key issue. This assessment has attempted to identify the degree of involvement by organised crime groups in terms of identifying gang members or associates arrested / identified prior to, during or after:

- The National Cannabis and Crime Operation[83].
- 2006 seizures of cannabis plants, > 40 cannabis plants[84]. Additional checks were also undertaken with District investigating officers on the 'Top 34' cannabis plant seizures.
- 2006 seizures of cannabis leaf, > 50 grams. Additional checks were also undertaken with District investigating officers on the 'Top 34' cannabis seizures.
- 2006 seizures of cannabis seeds, > 40 cannabis seeds.
- 2006 seizures of cannabis oil.
- 2006 seizures of cannabis resin.

New Zealand Police Officers are required under General Instruction D215 – Reporting Seizures of Drugs, on each occasion a seizure of controlled drugs is made; forward the details to the National Drug Intelligence Bureau. This is currently embodied by means of the New Zealand Police 'Drug Search and Seizure Form'. From January 2007 enhancements were made to the 'Drug Search and Seizure Form' to record 'Organised Crime' data. Identifying an organised crime link to cannabis seizures prior to and including 2006 has therefore been problematic. For this reason manual searches of the New Zealand Police National Intelligence Application (NIA) have been undertaken, however, because of the volume of seizures involved interrogation was limited to the amounts noted above.

[82] It is recognised New Zealand Police District seizure data may, in part, recognise those Districts that are placing more emphasis on cannabis offending, however, it may simply reflect prevalence.
[83] This information (arrests) is already captured in District reporting and is directed to the National Cannabis and Crime Operation Coordinator.
[84] From February 2007 the New Zealand Police Drug Search and Seizure Form was amended to include a field that captures organised crime involvement in a seizure of illicit drugs.

5.4.1 Organised Crime Links – Cannabis Plants Excluding the National Cannabis and Crime Operation

Given the organised crime related data limitations, the following explanations can be made.

Of the 1,075 seizure incidents only 68 seizure incidents (6%) identified confirmed or suspected links to organised crime. The remaining 1,007 seizure incidents (94%) represent other seizure incidents which have either no or unknown organised crime links.

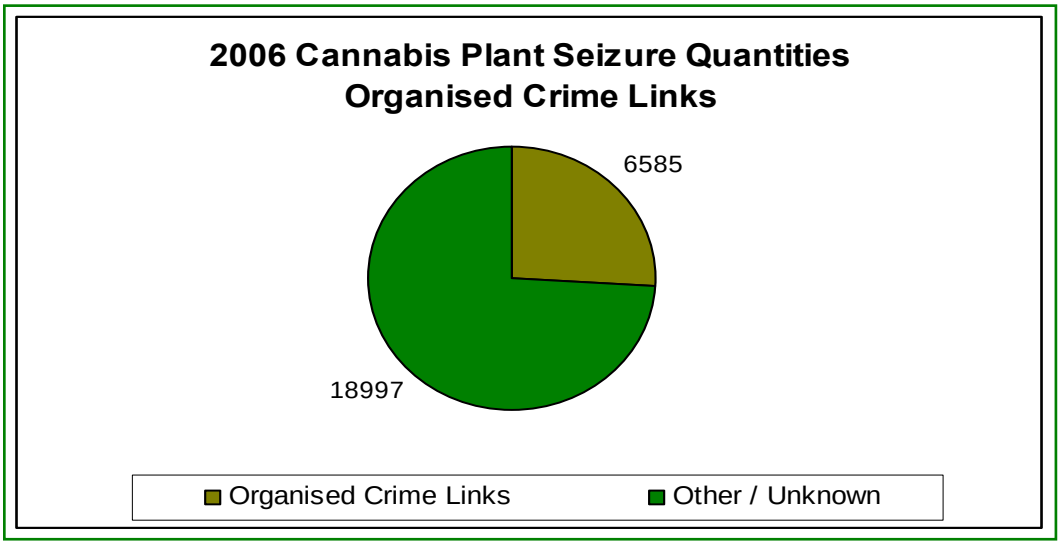


Figure 32: Cannabis Plant Seizure Quantities – Organised Crime Links

A more accurate reflection of organised crime involvement in the cannabis plant segment of the supply chain is provided in figure 32 which illustrates that of the 25,582 cannabis plants seized 6,585 cannabis plants (26% by volume) identified confirmed or suspected links to organised crime[85]. The remaining 18,997 cannabis plants (76%) represent either no or unknown organised crime links[86]. There is likely to be a greater actual percentage linked to organised crime than depicted.

Nationally, the Mongrel Mob ethnic gang were identified as the most influential in terms of confirmed or suspected links to 24 seizure incidents involving 2,422 cannabis plants. The District breakdown for seizures linked to the Mongrel Mob included:

[85] The volume of seizures (1075) precluded individual interrogation of all NIA data entries and the related offenders and / or suspects. The following compromise enabled a more accurate analysis and portrayal of organised crime in the cannabis supply chain, particularly at the upper level:

- Manual interrogation of NIA data entry for seizures of 40 or more cannabis plants (119 seizure incidents or 11% of cannabis plant seizures).
- Identification of the 'Top 34' cannabis plant seizures were referred to Districts to confirm whether a link to organised crime was identified. Significantly just fewer than 30% of the responses from Districts identified confirmed or suspected links to organised crime and is more likely to be an accurate gauge of organised crime particularly at higher levels.

[86] It is likely that a proportion of this category would reveal further organised crime links upon further investigation.

1. Bay of Plenty District recorded 9 seizure incidents involving 243 cannabis plants.
2. Eastern District recorded 5 seizure incidents involving 1,188 cannabis plants.
3. Central District recorded 4 seizure incidents involving 581 cannabis plants[87].

The Black Power ethnic gang were also prominent nationally with confirmed or suspected links to 12 seizure incidents involving 2,761 cannabis plants of which 2 of the seizure incidents in the Eastern District accounted for 2,488 cannabis plants.

Within the Eastern District it is believed the Mongrel Mob and Black Power have strong family links to the coast and as such have access to family owned land to conduct outdoor growing operations[88].

5.4.2 Organised Crime Links – Cannabis Heads / Leaf

Of the 3,545 seizure incidents 80 seizure incidents (2%) identified confirmed or suspected links to organised crime. The remaining 3,465 seizure incidents (98%) represent other seizure incidents which have either no or unknown organised crime links.

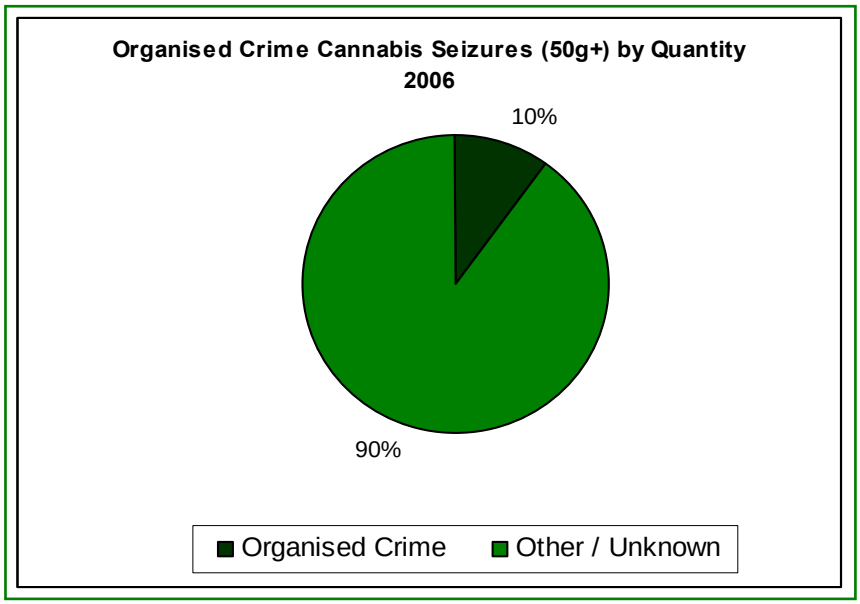


Figure 33: 2006 Cannabis Leaf Seizure Quantities – Organised Crime Links

A more accurate reflection of organised crime involvement in the cannabis supply chain is provided in Figure 33 which illustrates that of the 674,944 kilograms of cannabis seized nationally 68.900 kilograms (10% by volume)

[87] In addition the Wellington and Tasman Districts recorded two seizure incidents and the Counties Manukau and Canterbury Districts one seizure incident each.
[88] 2006 Operation OUTCOME – Eastern District.

identified confirmed or suspected links to organised crime[89]. The remaining 606,044 kilograms (90%) represent either no or unknown organised crime links[90].

There is likely to be a greater actual percentage of seizure incidents linked to organised crime than depicted.

Nationally, the Mongrel Mob ethnic gang was identified as the most influential in terms of confirmed or suspected links to 29 seizure incidents involving 10,434 kilograms. The District breakdown included:

1. Eastern District recorded 10 seizure incidents involving 6,405 kilograms.
2. Bay of Plenty District recorded 7 seizure incidents involving 2,328 kilograms.
3. Northland District recorded 3 seizure incidents involving 433 grams.
4. Central District recorded 3 seizure incidents involving 293 grams[91].

The Black Power ethnic gang was also prominent nationally with confirmed or suspected links to 8 seizure incidents involving 5,648 kilograms (Bay of Plenty and Eastern Districts 2 seizure incidents each).

The Tribesmen gang was also prominent nationally with confirmed or suspected links to 8 seizure incidents involving 10,714 kilograms (Bay of Plenty 4 seizure incidents). A wide range of other ethnic gangs and outlaw motorcycle gangs were also represented including the Nomads (4 seizure incidents), Head Hunters and Hells Angels (3 seizure incidents) and Filthy Few (2 seizure incidents).

5.4.3 Case Study Operation RAGWORT – Fuck the World Outlaw Motorcycle Gang 1996 / 1997)

During 1996, information was received by the Wanganui and Whangärei Police that a large scale cannabis cultivation operation was underway within the middle of the Wanganui National Park (midway between Mt Ruapehu and Mt Taranaki) which fell within the boundary of the Central District. The principal offenders were believed to be members of the Fuck the World (FTW) gang from Kerikeri and had loose connections to other gangs such as the Tribesmen and the Hells Angels.

[89] The volume of seizures (3545) precluded individual interrogation of all NIA data entries and the related offenders and / or suspects. The following compromise enabled a more accurate analysis and portrayal of organised crime in the cannabis supply chain, particularly at the upper level:
- Manual interrogation of NIA data entry for seizures of 5grams or more of cannabis heads/leaf (582 seizure incidents or 16% of cannabis head / leaf seizures).
- Identification of the 'Top 34' cannabis head/leaf seizures were referred to Districts to confirm whether a link to organised crime was identified. Four (10%) of the responses from Districts identified confirmed or suspected links to organised crime and is more likely to be an accurate gauge of organised crime particularly at higher levels.

[90] It is likely that a proportion of this category would reveal additional organised crime links upon further investigation.

[91] In addition the Wellington District recorded two seizure incidents and the Waitematä, Waikato, Canterbury and Southern Districts 1 seizure incident each.

A covert operation commenced in November 1996 and finally terminated in March 1997. The New Zealand Army and Air Force were utilised to assist approximately one hundred Police staff who were based at the Waiouru Army base for the termination.

Search warrants were executed in Whangärei, Kerikeri, Raetihi, Palmerston North, Taupö and Wanganui. Members of the Police Special Tactic Group (STG) apprehended four offenders living within the cannabis site. Extensive drying tents and accommodation was discovered. The offenders at the site were armed with pistols, semi automatic and automatic weapons and were equipped with generators, a television and food.

The offenders had used a helicopter pilot from Taupö to ferry staff, equipment and dried cannabis from the site. Ten principal offenders were charged in connection with growing operation (including the helicopter pilot). The prosecutions phase extended over the next two years with all receiving periods of imprisonment.

Four thousand eight hundred (4800) plants were recovered by Police along with 600 kilograms of dried cannabis leaf. Exhibits removed from the scene filled three army unimogs. Many of these exhibits including pumps, generators etc. had been stolen from the Auckland area.

This seizure remains the largest cannabis seizure in New Zealand.

5.5 RECOMMENDATIONS

- Withheld under Section 6(C) of the Official Information Act 1982

1. Withheld under Section 6(C) of the Official Information Act 1982
2. Withheld under Section 6(C) of the Official Information Act 1982
3. Withheld under Section 6(C) of the Official Information Act 1982

National Drug Intelligence Bureau actions required to enhance data capture include:

1. Development of Drug Search and Seizure Form fields specifically for the National Cannabis and Crime Operation.
2. The Drug Search and Seizure Form is enhanced to include the means of cultivation ie outdoor soil, indoor soil or indoor hydroponically.

6.0 CANNABIS DEMAND

The demand for cannabis in New Zealand is measured using several research instruments which also have application for and inform drug policy, supply and demand reduction initiatives.

In 1996[92] two outcome targets were identified based on the evidence from a 1990 survey[93]. The targets were:

- To reduce the prevalence of current cannabis use (used in the last 12 months and not stopped using) from 12% of persons aged 15 to 45 years in 1990, to 8% or less by the year 2005.
- To reduce the prevalence of frequent cannabis use (used 10 or more times in the last 30 days) from 2.4% of persons aged 15 to 45 years in 1990, to 1.5% or less by the year 2005.

The targets to reduce the prevalence of cannabis by 2005 have not been met. Although subsequent drug use survey methodology has changed the reality is the prevalence of cannabis has remained consistently high.

6.1 NEW ZEALAND DRUG USE SURVEYS

In New Zealand drug use surveys have been undertaken:

- In 1990, 1998 and 2001[94] by the Alcohol and Public Health Research Unit of the University of Auckland. In 2003[95] a drug use survey was undertaken by the Centre for Social and Health Outcomes Research and Evaluation (SHORE) of Massey University, Auckland.
- In 2006 a drug use survey was undertaken within a National Household Survey of "Legal Party Pill Use in New Zealand".
- In 2007[96] SHORE conducted an analysis of the four drug use surveys in 1998, 2001, 2003 and 2006.

In each of the surveys cannabis was identified as the third most popular drug after alcohol and tobacco but was overwhelmingly the most popular illicit drug.

The surveys first asked the respondents if they had 'ever used' cannabis, if so, whether they had used cannabis in the 'last year' and also identifies 'last month' use. Those that had used cannabis in the 'last year' were than asked a series of questions about their patterns of cannabis use including context of cannabis use, current conditions of cannabis supply.

[92] Cannabis, The Public Health Issues 1995-1996, Ministry of Health.
[93] Black S., Casswell S. 1993. Drugs in New Zealand: A Survey 1990. Auckland: Alcohol and Public Health Research Unit, University of Auckland.
[94] Wilkins C., Caswell S., Bhatta K. and Pledger M., Drug Use in New Zealand – National Surveys Comparison 1998 and 2001, Alcohol and Public Health Research Unit, University of Auckland.
[95] Drug Use in New Zealand – Analysis of the 2003 New Zealand Health Behaviours Survey – Drug Use (draft).
[96] Trends in Drug Use in the Population in New Zealand: Findings from National Household Drug Surveying in 1998, 2001, 2003 and 2006 (draft).

Figure 34 below depicts cannabis use data from the 1998, 2001, 2003 and 2006 surveys[97] which is split into 'ever used', 'last year' use and 'last month' use categories.

The percentage figure recorded for 'ever used' has remained consistent at around 50% of the population for the 1998, 2001 and 2003 but in 2006 a small reduction to 44.1% was achieved. It is difficult to interpret if this represents an "actual trend toward lower levels of cannabis use in New Zealand"[98]. Several views have been offered including people "choosing to use legal piperazine party pills or illegal drugs such as methamphetamine or MDMA" given the general rise in ATS drugs in the Asia Pacific region which might be impacting on the popularity of cannabis which is traditionally associated with lethargy and opting out of mainstream ambitions"[99]. Another explanation which might partly explain the reduction is the gradual decline in the 'ever used' tobacco statistics which have gone from 64.4% in 1998 to 57.6% in 2006. There might also be issues with the size of the 2006 sample compared with the 1998, 2001 and 2003 sample sizes and perhaps the uptake of mobile telephone use in New Zealand might also be a factor.

Likewise the percentage figure recorded for 'last year use' has remained consistent at around 20% of the population for the 1998, 2001 and 2003 but in 2006 a small reduction to 17.9% was achieved.

In terms of 'last month use' the percentage figure has remained consistent at around 10% for the 1998, 2001 and 2006 surveys. 'Last month use' data was not collected in the 2003 survey.

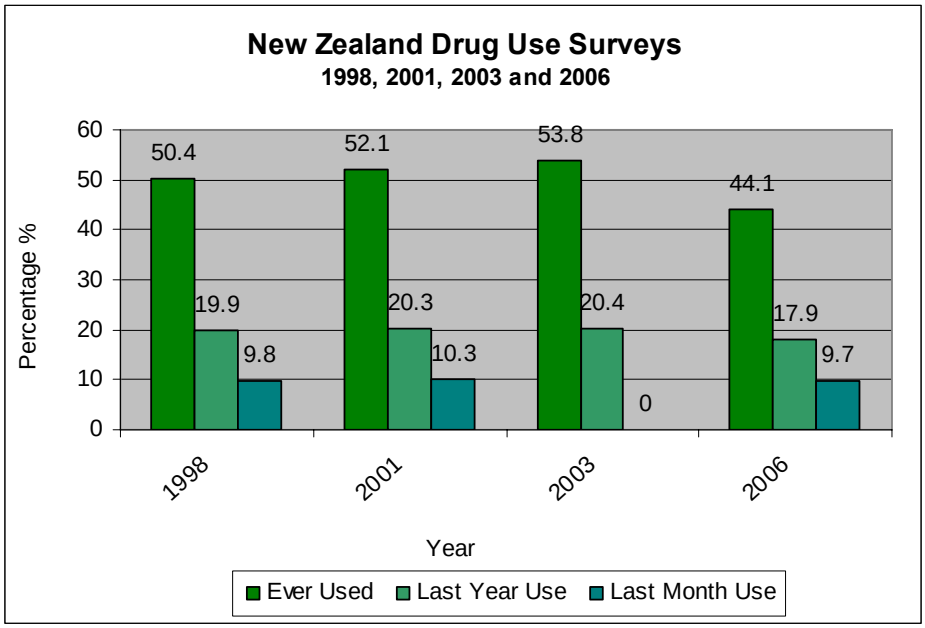


Figure 34: Cannabis Use Data from the "Trends in Drug Use in the Population in New Zealand: Findings from the National Household Drug Surveying in 1998, 2001, 2003 and 2006

[97] Ibid.
[98] Ibid.
[99] Ibid.

Whilst New Zealand drug use surveys continue to identify high prevalence of cannabis it is the 'ever used' and 'last month use' components which invariably receives the most publicity. The primary demand focus should centre on reducing 'last month use' which has remained consistently high and problematic use which is likely to be a smaller segment.

The 2003 survey[100] is the last survey in which a comprehensive analysis of cannabis use was undertaken. Other significant statistics highlighted in terms of 'last year use' category include:

- Maori (20.8%) and non Maori (14%) illustrated Maori are over represented in this category.
- An estimated 15.1% had used cannabis frequently (10 or more occasions per month).
- Significantly an estimated 39.5% had driven a motor vehicle[101] under the influence of cannabis.
- Approximately 14.1% had experienced harmful effects to their health because of their cannabis use and 24.1% had experienced harmful effects to their energy and vitality.

Other categories covered included:

- 47.3% of respondents reported they had purchased at least 'some' of their cannabis from a 'tinny house'. A decreasing age was noted in this category – for example 73% of persons aged 13 to 17 years of age purchased 'some' of their cannabis from a 'tinny house' compared to 19% of persons aged between 35 and 44 years of age.
- Overall, 23.4% knew or had heard that a dealer sold other drugs. Of these respondents 30.5% had been encouraged to purchase other drugs and of those 39.8% actually purchased other drugs.

6.1.1 New Zealand Drug Use Surveys – Age at First Use; Cannabis[102]

The age at which illicit drugs, particularly cannabis, is first used is a key issue highlighted in the Australian Cannabis Strategy 2006 – 2009. Delaying and preventing the age of uptake of cannabis in New Zealand should be and is a clear demand reduction goal. The longer the age of uptake can be delayed or prevented means that the demand for cannabis will be reduced over the longer term. Additional information was obtained from Massey University to identify, from the 2001, 2003 and 2006 surveys, from those respondents that had 'ever used' cannabis, specifically at what age the respondents had first used cannabis[103].

[100] Drug Use in New Zealand – Analysis of the 2003 New Zealand Health Behaviours Survey – Drug Use (Draft).
[101] This category is split into 'hardly any', 'some', 'most' and 'all driving'. This figure appears to have escalated since the 1998 and 2001 surveys.
[102] This additional information was provided by Dr Chris Wilkins, Senior Researcher, Drugs Team Leader, Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University from the 2001, 2003 and 2006 survey data.
[103] The same questions were used in each of the 2001, 2003 and 2006 surveys.

Figure 35 below depicts the age range of respondents that had first used cannabis commencing from respondents less than 13 years of age, then from 13 years of age and individual years through to 18 years of age and finally the respondents 18 years of age and over.

The following points, by age, illustrate the trend depicted:

- <13 years of age has remained stable with 2.50% (2001), 2.54% (2003) and 2.16% (2006) recorded.
- 13 years of age identifies an increase from 4% (2001), 5.12% (2003) to 5.71% (2006).
- 14 years of age identifies an increase from 8.28% (2001), 8.98% (2003) to 10.29% (2006).
- 15 years of age identifies a slight increase from 14.1% (2001), a decrease to 12.99% (2003) and an increase to 14.56% (2006).
- 16 years of age identifies an increase from 15.22% (2001), a decrease to 14.32% (2003) and an increase to 19.39% (2006).
- 17 years of age identifies a slight increase from 13.2% (2001) to 14.01% (2003) and then a slight decrease to 13.68% (2006).
- 18 years of age identifies a decrease from 15.82% (2001), 14.03% (2003) to 13.53% (2006).

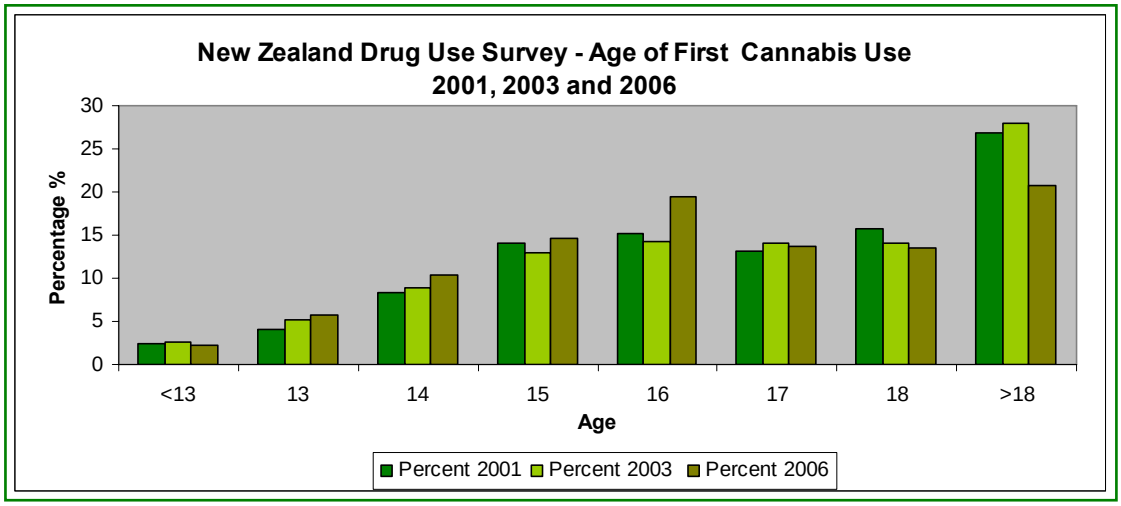


Figure 35: Respondents that had ever used cannabis and the age at which cannabis respondents first used cannabis. Sourced from the 2001, 2003 and 2006 Drug Use Surveys

The statistics comprising the 2001, 2003 and 2006 survey (although representing only a 5 year timeframe) illustrate that there is a gradually increasing trend of first cannabis use in respondents 18 years of age and younger. This is a highly undesirable trend and was the focus of several recommendations emanating from the Health Select Committee Inquiry on Cannabis. This trend must be reversed in order to reduce the demand for cannabis, over the longer term.

As already highlighted, there is potential to derive significant gains in reducing the demand for cannabis by introducing comprehensive school-based drug education and intervention programmes embedded into the school curriculum, commencing from primary school. Such an initiative adheres to the International Narcotics Control Board best practise for drug control strategies *"to utilise balanced, combined and integrated approaches at all levels for maximum effectiveness".*

6.1.2 New Zealand Drug Use Surveys – Type of Cannabis Used

The 1998 and 2001 surveys highlighted the 'relative recent emergence of hydroponic cannabis cultivation in New Zealand' and the use of 'skunk' termed a more potent form of cannabis.

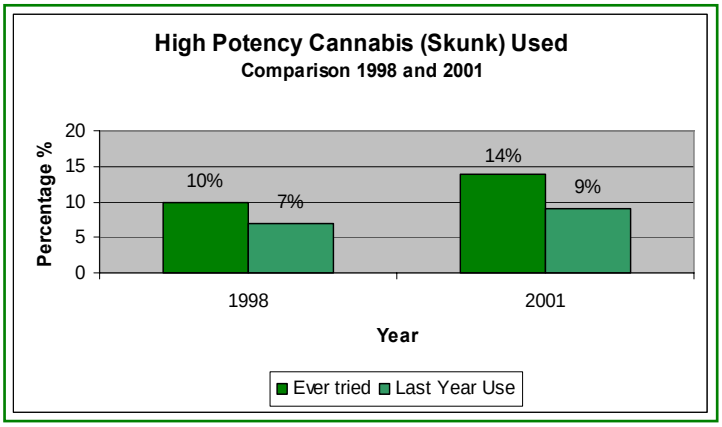


Figure 36: High Potency Cannabis (Skunk) Used – Comparison 1998 and 2001 Drug Use Surveys

Figure 36 depicts the increases recorded in the 1998 and 2001 surveys which noted *"there was an increase in the proportion of the sample that had ever tried 'skunk' from 10% in 1998 to 14% in 2001".* In addition, there were increases in nearly all age groups that had ever tried 'skunk' including 15 to 17 year olds from 10% in 1998 to 16% in 2001, 20 to 24 year olds from 18% in 1998 to 27% in 2001, 30 to 34 year olds from 7% in 1998 to 12% in 2001.

The 1998 and 2001 surveys noted those that had used 'skunk' in the last year increased from 7% in 1998 to 9% in 2001 and was "particularly so for 15 to 17 year olds increasing from 8% in 1998 to 14% in 2001.

The 2003 and limited 2006 survey data did not include statistics on 'ever tried' or 'last year use' of 'skunk' or 'new cannabis'.

Table 7: 'Last Year' Users – Type of Cannabis

Type of Cannabis Usually Used	Total
Cannabis Heads	43.1%
'Skunk' or 'New Cannabis'	**27.6%**
Cannabis Leaf	25.2%
Cannabis Oil	3.2%
Cannabis Resin	1%

The 2003 survey did record from those that had 'used' cannabis in the 'last year' the type of cannabis they usually used. Table 7 illustrates 43.1% of last year cannabis users had used cannabis heads, 27.6% used 'skunk' or 'new cannabis', 25.2% used cannabis leaf with smaller percentages using cannabis oil and cannabis resin respectively.

6.2 ILLICIT DRUG AND CRIMINAL OFFENDING NEXUS

The relationship between illicit drugs and criminal offending is a contentious subject. In the New Zealand context the relationship between illicit drugs and criminal offending has largely been anecdotal but is now being increasingly informed by the New Zealand Arrestee Drug Abuse Monitoring (NZ ADAM), the Illicit Drug Use Monitoring System (IDMS), Drug Use Surveys and other New Zealand illicit drug research projects.

Australian research indicates that *"the relationship between illicit drugs and criminal activity is very complex"*[104], however the report notes *"illicit drugs are associated with both violent and property crime, but the association appears strongest for property crime".* The Australian Minister of Justice, Senator Chris Ellison stated in a press release (July 2006*) "this report clearly reinforces the linkages between illicit drug use and crime".*

The South Australian Police Illicit Drug Strategy, *'Preventing drug use, preventing crime' notes:*

'While criminological opinion differs, there is clear evidence of illicit drug use by those who commit crime, often as a means to support their drug habit. Indeed illicit drug use drives many of our crime problems and sustainable reductions will only occur if we can prevent the use of illicit drugs. There are broader health, social and economic impacts to consider and Police recognise the important role in reducing these effects as well'.

6.2.1 New Zealand Arrestee Drug Abuse Monitoring System

The New Zealand Arrestee Drug Abuse Monitoring (NZ ADAM) is a programme which measures drug and alcohol use among people who have recently been arrested by the New Zealand Police. Whilst NZ ADAM is in its infancy, it is clearly illustrating links between illicit drugs and criminal offending.

Internationally, there are equivalent arrestee drug use monitoring systems operating in approximately 14 other countries, including the Drug Use Monitoring in Australia (DUMA) programme and the United Kingdom's New England and Wales Arrestee Drug Abuse Monitoring Research (NEW ADAM) programme. Collectively, the different national variations of the research projects from part of the International Arrestee Drug Abuse Monitoring (I ADAM) programme.

Data collection for the NZ ADAM pilot programme commenced at Henderson, Whangärei, Dunedin and Hamilton in 2005. Information and statistics in this section are derived from the first Annual Report[105] covering the period from 01/07/2005 to 30/06/2006.

[104] Australian Attorney Generals Department, "The Relationship Between Drugs and Crime" (2004).
[105] New Zealand Arrestee Drug Abuse Monitoring (NZ ADAM) Annual Report 2006, Health Outcomes International, Australia – Jim Hales, Jenni Bowen and Jane Manser.

The aims of NZ ADAM include:

- To improve the quality of data available on illicit drugs and alcohol use in the offender population.
- Provide an early warning system for changes in patterns of drug use among the offender population.

The key objectives of NZ ADAM include:

- Gathering information about arrestees' illicit drug and alcohol use prior to their arrest by the New Zealand Police.
- Corroborating self-reported information about the link between substance use and offending with urinalysis.
- Profiling drug use and criminal activity.

The key outcomes sought from NZ ADAM (over time) include:

- Greater responsiveness of law enforcement agencies to emerging trends, based on a more sophisticated understanding of the drug-crime nexus.
- An increased knowledge base upon which to base policy development and resource decisions.

6.2.2 NZ ADAM – Urine Analysis

A total of 2206 detainees were available to participate in the NZ ADAM data collection process during the 2005/2006 year covering the four sites. Of these 950 agreed to be interviewed and completed the interviewing process. A total of 561 or 59% participants agreed to provide a urine sample and of these 557 provided samples acceptable for analysis.

In comparison 81% of DUMA participants agreed to provide a urine sample considerably higher than NZ ADAM. One factor that may have contributed to the low percentage rate of consent for urine analysis was a possible cultural issue for the Mäori detainees who made up 47% of the sample.

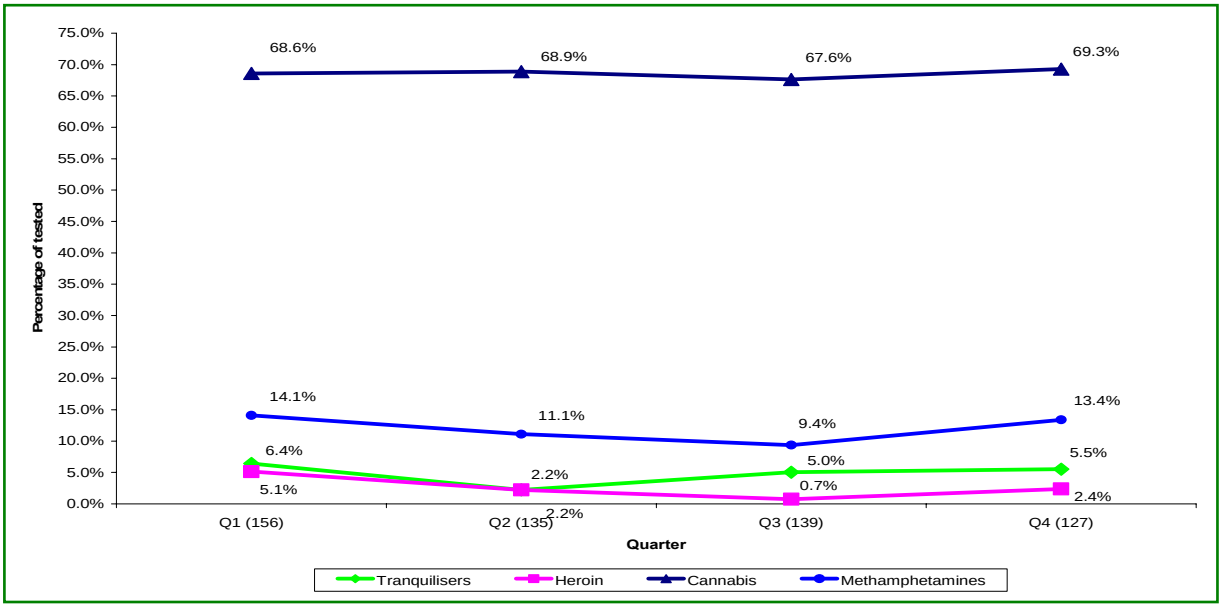


Figure 37: NZ ADAM – Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs (Number = 557)

Figure 37 clearly illustrates that consistently throughout 2005 and 2006 69% of the 557 participants who provided a urine sample tested positive to cannabinoids which is significantly higher than the 54% that tested positive for cannabinoids in the equivalent Australian DUMA 2005 Annual Report[106]. The results of the four site variation ranges testing positive to cannabinoids are depicted in Table 8 below.

Table 8: NZ ADAM Positive Samples for Cannabinoids by Site

Site	3rd Quarter 2005	4th Quarter 2005	1st Quarter 2006	2nd Quarter 2006
Whangärei	76.5%	80.6%	72.2%	72.1%
Henderson	69.5%	51.0%	62.5%	48.3%
Hamilton	65.4%	86.4%	75.0%	86.2%
Dunedin	62.2%	70.6%	59.3%	66.7%

The percentage testing positive to cannabinoids are consistently high throughout the country and is substantially higher than the 'ever used' cannabis component of the New Zealand Drug Use Surveys.

6.2.3 NZ ADAM – Self Reported Cannabis Use

Participants were asked a series of questions regarding their drug use patterns. Participants were asked if they had 'ever used' a range of drugs, used them in the last 30 days or the last 48 hours.

Figure 38 below illustrates 94% of respondents had 'ever used' cannabis, 72% had 'used cannabis in the last 30 days' and 45% had used cannabis in the 'last 48 hours'.

[106] Drug Use Monitoring in Australia (DUMA) 2005 Annual Report on drug use among Police detainees. Research Public Policy Series No.70. Australian Institute of Criminology, 2006.

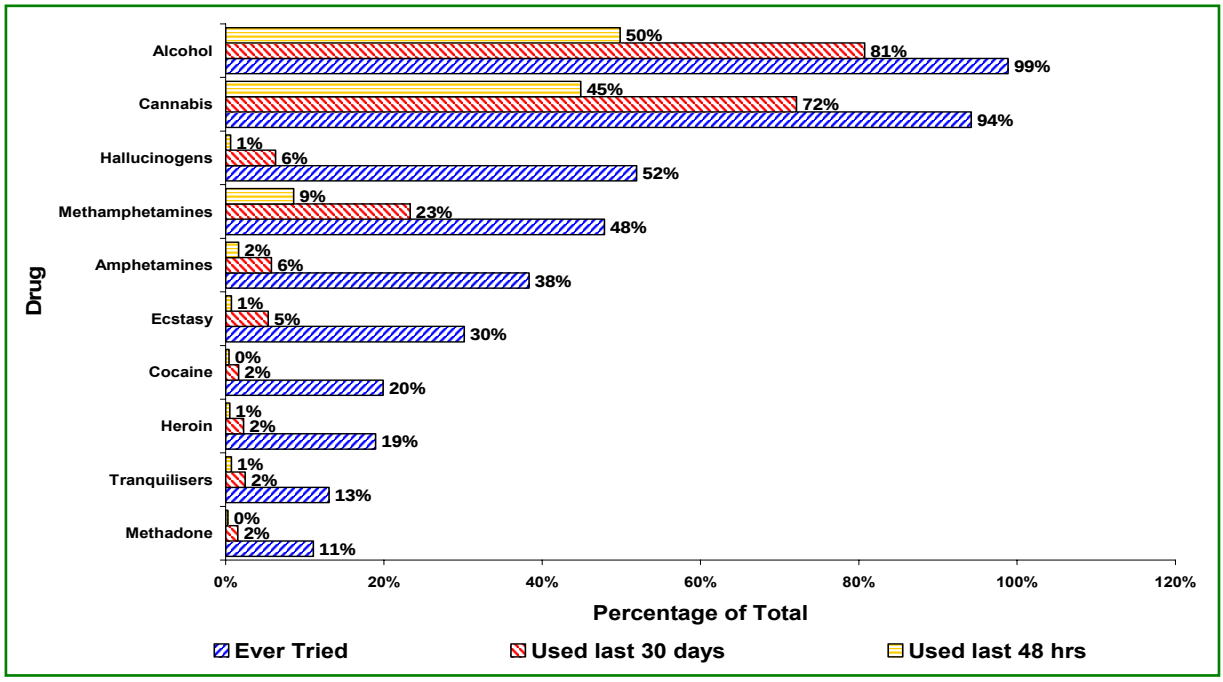


Figure 38: NZ ADAM – Types of Drugs Ever Used, Used in the Last 30 Days and Last 48 Hours

In terms of the proportion of participants using cannabis in the last 30 days Table 9 below depicts consistently very high use of cannabis within arrestees by site.

Table 9: Self Reported Cannabis Use by Site

Site	3rd Quarter 2005	4th Quarter 2005	1st Quarter 2006	2nd Quarter 2006
Whangärei	81.8%	77.8%	80.0%	73.6%
Henderson	69.1%	63.0%	75.9%	60.6%
Hamilton	69.2%	71.7%	69.4%	74.0%
Dunedin	66.1%	78.9%	66.0%	81.0%

The corroboration of 'self reported use' and positive urinalysis results was highest for cannabis, with 94% of those testing positive having used cannabis in the previous 30 days and 68% testing positive reporting cannabis use in the previous 48 hours.

6.2.4 NZ ADAM – Age at Which Drugs First Used, Cannabis

Participants were asked to report the age at which they had first tried each drug. The responses, expressed as a proportion of the number of respondents who reported ever having used each drug type, are summarised in Figure 39. The number of respondents reporting ever having used each drug is contained in parentheses following each drug name on the horizontal axis.

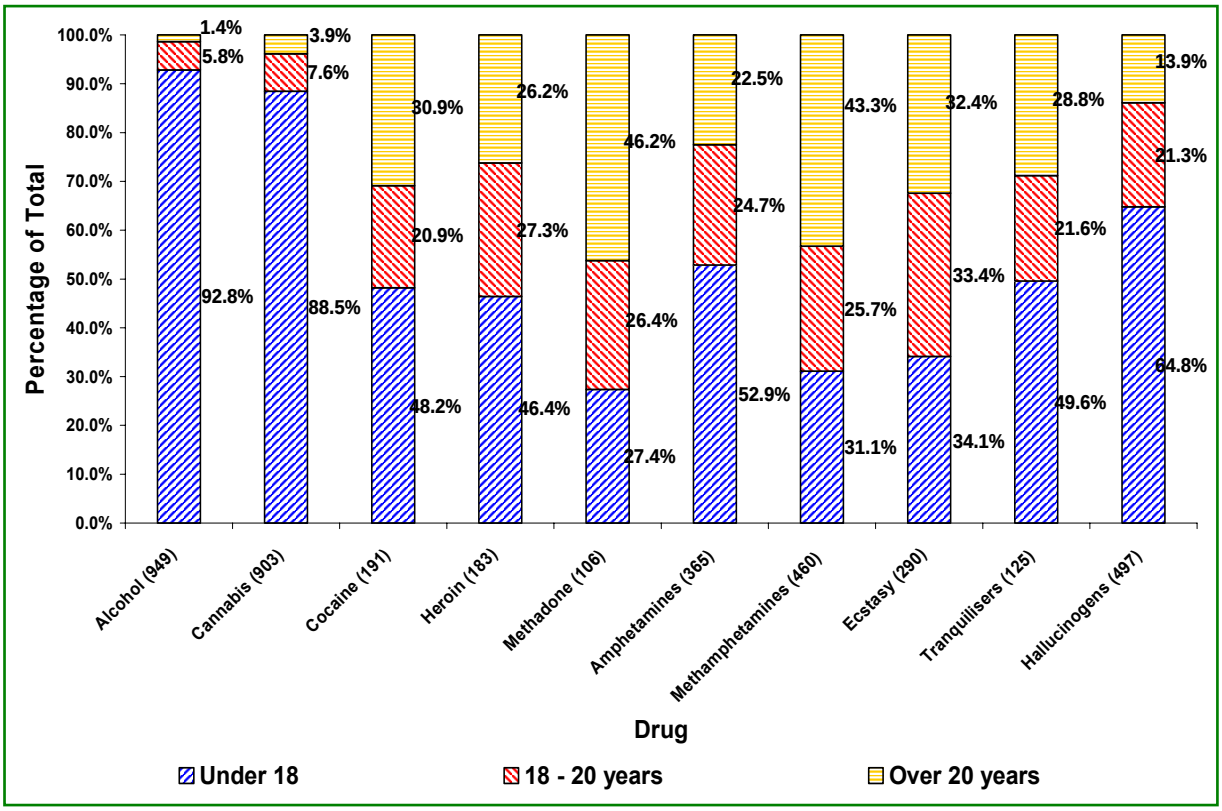


Figure 39: NZ ADAM – Age at Which Drugs First Tried

Significantly, cannabis was first used by 88.5% of those respondents under 18 years of age (exceeded only just by Alcohol at 92.8%) and again is significantly higher than the increasing levels identified in the Drug Use Surveys. This evidence further illustrates the importance of drug education programmes embedded into the school curriculum, commencing at primary school to assist in reducing the demand for cannabis over the long term.

6.2.5 NZ ADAM – Self Reported Dependence on Drugs

Participants were asked whether they had felt that they needed or were dependent on the drugs that they used in the last 12 months.

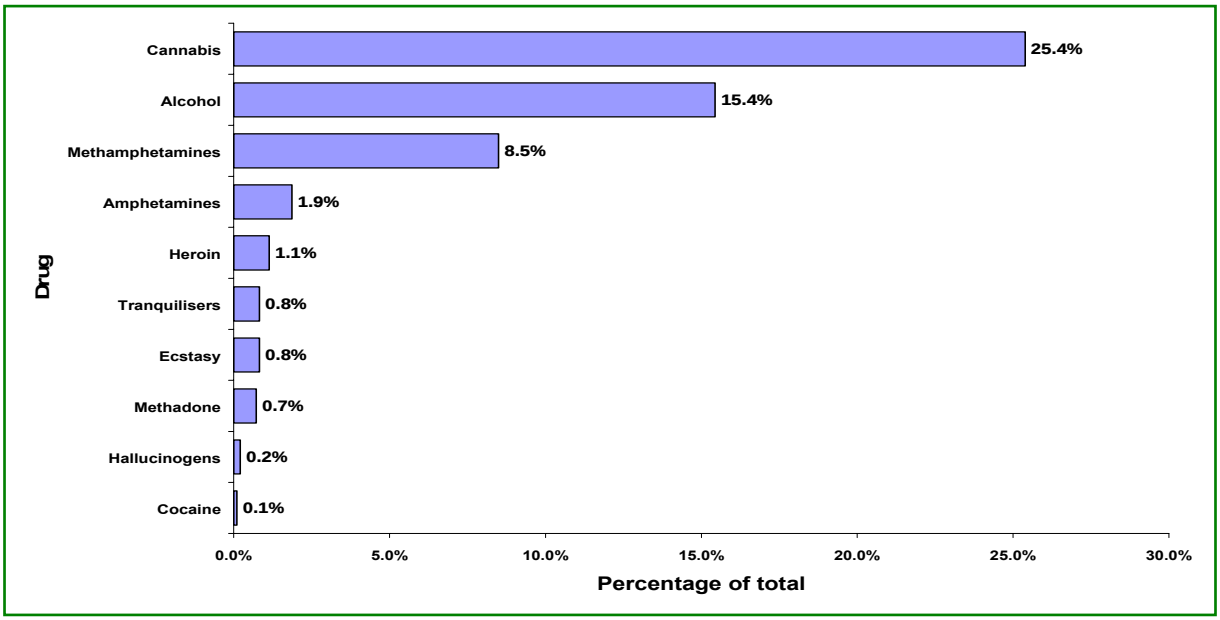


Figure 40: NZ ADAM – Reported Dependence on Drugs in the last 12 Months

The responses to each drug are depicted in Figure 40 which illustrate 25.4% of participants indicated that they had felt dependent on cannabis in the past 12 months. This proportion surpasses reported dependence on alcohol or methamphetamines by significant margins.

6.2.6 NZ ADAM – Self Reported Drugs and Driving

Participants were asked how much of their driving was done whilst under the influence of drugs.

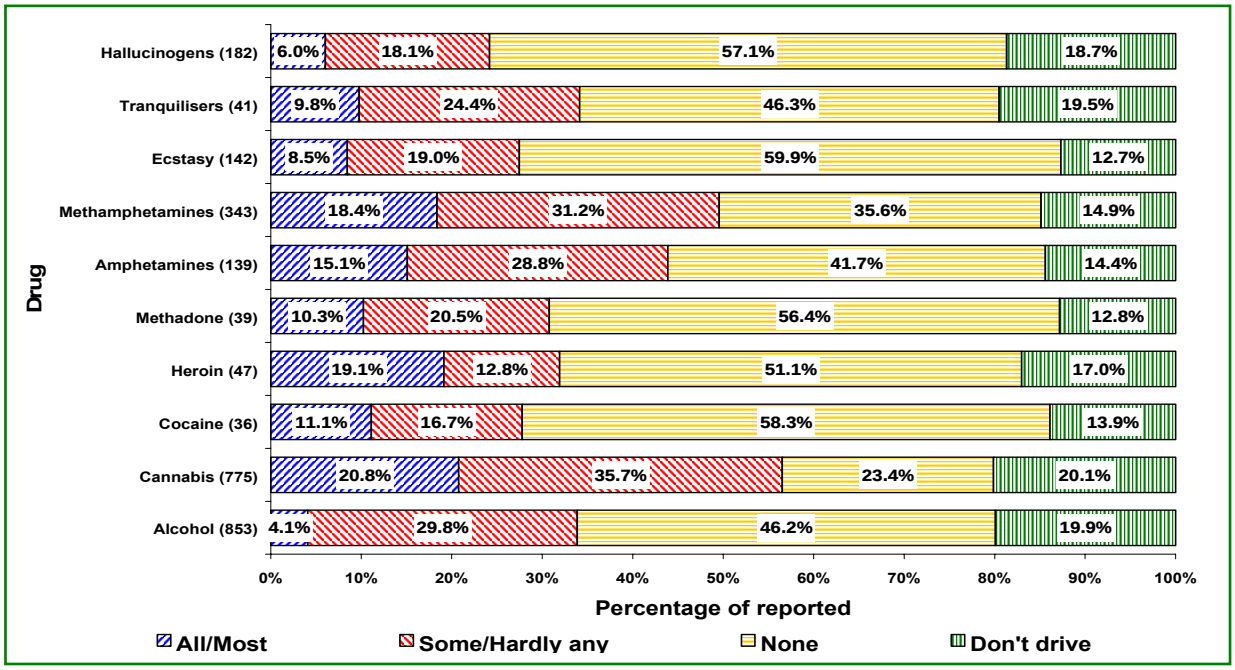


Figure 41: NZ ADAM – Driving Under the Influence of Drugs

The responses are presented in Figure 41[107] above which illustrates users of cannabis, most often reported driving at least sometimes whilst under the influence. Significantly, 56.5% of cannabis users did between 'All / Most' and 'Some / Hardly Any'[108] of their driving while under the influence of cannabis which is substantially higher than the 34% of alcohol users who reported driving while under the influence of alcohol. The high proportion of cannabis users driving while under the influence of cannabis is corroborated by Illicit Drug Monitoring System (IDMS) data.

6.2.7 NZ ADAM – Self Reported Using Drugs When Arrested

Participants were asked whether they had been using drugs at the time of their arrest. Of these, 51% of participants reported that they had been using at least one drug at the time. In comparison 42% of those arrested in DUMA reported having used drugs prior to their arrest. Responses illustrate 37.2% of participants reported using alcohol at the time, 20.6% reported using cannabis and almost 7% reported using methamphetamines[109].

The participants who stated they had been using drugs when arrested were then asked the extent to which they believed their drug use contributed to their involvement in criminal activities. Of the 193 cannabis users who answered, 26% reported their cannabis use contributed between 'some' and 'all' to their criminal activities[110].

6.3 ILLICIT DRUG MONITORING SYSTEM (IDMS)[111]

The Illicit Drug Monitoring System (IDMS)[112] is a strategic drug monitoring system to inform policy and strategic response to illegal drug use and drug related harm and therefore complements the New Zealand Drug Use Surveys and the Arrestee Drug Abuse Monitoring programme.

The principal aims of the IDMS include:

- Tracking trends in illegal drug use.
- Documenting the availability, price and purity of illegal drugs of greatest concern.
- Documenting the harms and problems users experience from the use of illegal drugs.

[107] For ease of comprehension, the categories "All" and "Most" have been incorporated into one category ("All / Most") and the categories "Some" and "Hardly Any" have been incorporated into one category ("Some / Hardly Any").
[108] The figure for methamphetamine (50%) and amphetamine (44%) was also very high compared to alcohol users.
[109] Participants could report using more than one drug.
[110] In comparison of the alcohol consumers who answered 69% reported their alcohol consumption contributed between 'some' and 'all' to their criminal activities.
[111] Wilkins C., Girling M. and Sweetsur P., Recent Trends in Illegal Drug Use in New Zealand, 2006 – Findings from the Combined Modules of the 2006 Illicit Drug Monitoring System, Massey University, Centre for Social and Health Outcomes Research and Evaluation and Te Ropu Whariki, 2006.
[112] The IDMS was first conducted in 2005 and was developed and piloted during early research into the Socioeconomic Impact of Methamphetamine in New Zealand.

The IDMS uses research methodologies which are successfully used in a number of countries to monitor trends in illegal drug use and drug related harm.

Three sources of information are used:

- Face to face interviews with frequent illicit drug users in the community who are considered to be a sentinel group for detecting trends in illicit drug use as they generally use a number of drug types and have knowledge of other drug types through interaction with drug using peers and drug dealers. A total of 318 frequent drug users were interviewed comprising 114 frequent methamphetamine users, 111 frequent MDMA users and 93 frequent injecting drug users from Auckland, Wellington and Christchurch.
- Telephone interviews with Key Experts who have regular contact with illicit drug users through their employment (including law enforcement).
- Secondary data sources such as the New Zealand Drug Use Surveys, drug seizure statistics, admissions to drug treatment programmes and calls to drug support and information lines.

The sources of information, 'frequent illicit drug users', for the 2006 IDMS did not specifically seek or capture frequent cannabis users, however, the questions asked within the 'patterns of illicit drug use' segment included questions relating to cannabis.

6.3.1 IDMS – Frequent Illicit Drug Users, Patterns of Drug Use

Frequent drug users were asked a series of questions about their 'lifetime' and 'recent' use of a range of different drug types.

Table 10 below illustrates that frequent methamphetamine, MDMA and intravenous drug users almost unanimously reported lifetime use of cannabis with the median age that cannabis was first tried being 14 years of age.

Table 10: Lifetime use and use in the last six months of Alcohol, Tobacco and Cannabis

Drug Type	Prevalence of use age of first use	Methamphetamine users (n=114)	Ecstasy users (MDMA) (n=111)	Intravenous drug users (IDU) (n=93)	Combined modules (n=318)
Alcohol	Ever tried	97%	99%	99%	98%
	Last six months (%)	86%	98%	68%	85%
	Median age first used	13 years	14 years	13 years	13 years
Tobacco	Ever tried	90%	77%	94%	86%
	Last six months (%)	81%	61%	86%	75%
	Median age first used	13 years	14 years	13 years	14 years
Cannabis	**Ever tried**	**98%**	**99%**	**100%**	**99%**
	Last six months (%)	**86%**	**92%**	**80%**	**85%**
	Median age first used	**14 years**	**15 years**	**14 years**	**14 years**

6.3.2 IDMS – Frequent Illicit Drug Users, Concurrent Use of Drugs

Table 11 below illustrates that cannabis is the most common illicit drug type used concurrently with methamphetamine, MDMA and intravenous drug use.

Table 11: Other Drug Types Used Concurrently with Methamphetamine, MDMA and Injected Drugs

Drug types used concurrently	Methamphetamine users (n=102)	Ecstasy users (MDMA) (n=108)	Intravenous drug users (IDU) (n=88)
Methamphetamine	100%	7%	11%
Tobacco	83%	48%	88%
Cannabis	**74%**	**59%**	**66%**
Alcohol	61%	76%	28%
Alcohol (more than 5 standard drinks per session)	48%	49%	20%
Benzodiazepines	9%	3%	40%
Ecstasy (MDMA)	9%	100%	5%

6.3.3 IDMS – Frequent Illicit Drug Users, Binging on Illicit Drugs

Table 12 below illustrates the drug types used to binge on in the previous 6 months. Binging was defined as using a drug for 48 hours or more continuously without sleep. Overall 69% of the frequent drug users had binged on a drug in the previous six months with cannabis binging featuring prominently.

Table12: Illicit Drug Types Binged on in the Last Six Months

Drug types binged on (used 48 hours +)	Methamphetamine users (n=103)	Ecstasy users (MDMA) (n=52)	Intravenous drug users (IDU) (n=64)	Combined modules (n=219)
Methamphetamine	88%	19%	28%	54%
Cannabis	**38%**	**40%**	**39%**	**39%**
Alcohol	36%	71%	34%	44%
Benzodiazepines	3%	0%	17%	6%
Ecstasy (MDMA)	15%	77%	6%	27%
Legal piperazine party pills	8%	21%	1%	11%
Crystal methamphetamine	30%	8%	13%	20%
Amphetamine sulphate	16%	29%	23%	21%
LSD	13%	27%	3%	13%
Nitrous oxide	0%	12%	2%	3%
Heroin	2%	0%	6%	3%
Other opiates	1%	0%	45%	14%

6.3.4 IDMS Frequent Illicit Drug Users, Cannabis Availability, Price and Purity

The following information summarises specific information obtained relating to cannabis in which 86% of the frequent drug users interviewed indicated they felt confident to comment on the price, purity and availability of cannabis in the previous six months. IDMS reported that overall:

- The current availability of cannabis[113] was assessed as 'very easy' / 'easy'.
- The availability of cannabis was assessed as 'stable'.
- The median price paid[114] for a cannabis 'tinny / foil' was $20 (highlighted as 1.5 grams) and the median price paid for an ounce (28 grams) was $300.
- The price for cannabis was 'stable'.
- The strength of cannabis was assessed as 'high' / medium'.

Cannabis availability in New Zealand has generally remained 'very easy' / 'easy' with stable prices and is indicative of consistent demand.

Whilst Table 13 below illustrates that the overall change in purity (strength) of cannabis was assessed as 'stable' / 'fluctuating', the number of frequent drug users indicating increasing strength versus decreasing strength of cannabis complements the findings from the New Zealand Drug Use Surveys which illustrated an increase in the use of 'skunk' or 'new cannabis'.

Table 13: Change in Purity of Cannabis

Change in purity of cannabis (%)	Methamphetamine users (n=95)	Ecstasy users (MDMA) (n=82)	Intravenous drug users (n=85)	Combined modules (n=262)
Decreasing [1]	**4%**	**6%**	**5%**	**5%**
Stable [2]	53%	45%	39%	46%
Fluctuating [2]	26%	37%	32%	31%
Increasing [3]	**17%**	**12%**	**25%**	**18%**
Average change in purity score (1=decreasing – 3=increasing)	2.1	2.1	2.2	2.1
Overall recent change	**Stable/ Fluctuates**	**Stable/ Fluctuates**	**Stable/ fluctuates**	**Stable/ fluctuates**

[113] 99 methamphetamine users, 92 MDMA users and 85 injecting drug users.
[114] 71 methamphetamine users, 80 MDMA users and 78 injecting drug users.

6.3.5 IDMS Frequent Illicit Drug Users, Drug Use and Driving

Similarly, the Findings from the Cannabis Module of the 2005 IDMS identified 71% of the frequent cannabis users had driven under the influence of drugs (other than alcohol) in the previous six months[115]. The drug type which participants were most commonly under the influence of when driving was overwhelmingly (96%) cannabis. The high proportion of frequent drug users driving whilst under the influence of illicit drugs, particularly cannabis is very significant.

[115] In comparison 29% of the frequent cannabis users had driven under the influence of alcohol in the last six months.

7.0 CONCLUSION

Cannabis has historically been and remains the cornerstone of illicit drugs in New Zealand. New Zealand is maintaining high prevalence levels of cannabis compared to global prevalence. The high prevalence momentum has created a generation of users that may now be influencing the next generation.

Cannabis is a harmful drug. Cannabis related admissions to publicly funded hospitals exceed the combined total of admissions for opiates, amphetamines and cocaine. Primary and secondary admissions for Psychotic Disorders, Mental and Behavioural Disorders, Schizophrenia, Schizotypal and Delusional Disorders and Dependence collectively form a significant and increasing proportion of the diagnoses.

The advent of hybrid strains, the reinvigoration of the sinsemilla growing technique and the introduction of other enhanced growing techniques has resulted in a global trend of significant increases in THC content in cannabis. It is therefore likely cannabis will become more harmful in New Zealand in the future.

The age at which cannabis is first used is continuing to show an alarmingly decreasing trend. In order to reduce the demand for cannabis and other illicit drugs it is important that enhanced comprehensive school-based drug education and intervention programmes, commencing at primary school are developed as an immediate priority.

There is a clearly identified need to implement a 'Cannabis Strategy' or 'Cannabis Action Plan' in recognition of the findings of this assessment which are almost identical to the 'identified need' for an Australian 'National Cannabis Strategy'.

The New Zealand Police 'Cannabis and Crime Operation' is the most effective supply reduction technique to reduce the supply of cannabis nationally and reduce the influence of organised crime. Using the indicators of the Ministry of Health cannabis related hospital admission data and Police District cannabis seizure data it is estimated that cannabis is most prolific in the following Police Districts:

- Bay of Plenty District
- Eastern District
- Northland District
- Central District
- Tasman District
- Waikato District

The extremely high rates of drug use prevalence among arrestees in New Zealand, with cannabis being the most prevalent, demonstrates linkages between drugs and crime.

The twenty-three recommendations made to government following the release in 2003 of the Health Select Committee Inquiry Report on Cannabis comprising initiatives focusing on youth, health programmes and education would appear not to have resulted in significant reductions in the demand for and supply of cannabis in New Zealand.

A range of supply and demand reduction related recommendations made in this assessment are broadly consistent with, but further enhance, the recommendations made to Government following the 2003 Health Select Committee Inquiry Report on Cannabis.

8.0 FUTURE TRENDS

- Cannabis is likely to remain the cornerstone of illicit drugs in New Zealand.

- It is almost certain that a recently completed ESR and New Zealand Police analytical initiative will reveal elevated levels of THC in indoor hydroponically cultivated cannabis. It is possible current ESR analytical initiatives of cannabis cultivated outdoors will also reveal elevated levels of THC.

- Outdoor cannabis cultivation currently is, and is likely to remain, the most favoured means to cultivate cannabis in New Zealand.

- Indoor cannabis cultivation is likely to remain a favoured means to cultivate cannabis in or close to metropolitan areas. There is likely to be more widespread indoor cannabis cultivation in New Zealand given there is generally limited specific intelligence and investigative targeting by Police Districts outside of the National Cannabis and Crime Operation.

- Indoor hydroponics operations, whilst not currently a prominent feature statistically in New Zealand Police seizure data, is likely to become more widespread.

- Existing domestic organised crime groups (particularly Ethnic Gangs) are highly likely to maintain their national dominance in cannabis cultivation and distribution.

- The possible future entry of transnational criminal groups into cannabis cultivation and distribution, particularly Asian criminal groups, should not be overlooked. It should be noted that Asian criminal groups have:
  - Made significant inroads into the New Zealand synthetic drug market
  - Established business relationships with both outlaw motorcycle gangs and ethnic gangs; and,
  - Are prominent within the Australian and the Canadian cannabis markets.

APPENDIX I INTERNATIONAL DRUG CONTROL CONVENTIONS

The three international drug control conventions provide the legal basis for the international control of drugs of abuse and are the foundation of international efforts against the abuse of illicit drugs. The Conventions ensure illicit drugs are only available for legitimate medical and research purposes.

Each Member State that is a signatory to a particular convention is required to implement appropriate legislation, introduce the necessary administrative and enforcement measures to eliminate or reduce demand for illicit drugs. Member States are also expected, in terms of the people who have become dependent on illicit drugs, to take steps *"for early identification, treatment, education, aftercare, rehabilitation and social reintegration of the persons involved".* Member States are also required to cooperate not only with other States but also with the UN drug control organisations.

New Zealand is a signatory to and has ratified each of the three UN Conventions. The three Conventions are the:

- Single Convention on Narcotic Drugs, 1961[116] (as amended by the 1972 Protocol) known as the "1961 Convention" forms the bedrock of the global drug control regime against illicit manufacture and trafficking of narcotic drugs. The 1961 Convention consolidated previous treaties and broadened the scope to include cannabis and allow control of any drugs with similar effects to those specified[117].

  The "1961 Convention" affirms the importance of medical use of controlled substances. Several articles contain provisions relating to medical and scientific use of controlled substances.

  There are four schedules within the "1961 Convention" and each has different criteria for scheduling. Drugs considered particularly liable to abuse, or to produce ill effects, can be listed in both Schedule 1 and Schedule 4.

Cannabis and cannabis resin and extracts and tinctures of cannabis are classified within Schedule One of the 1961 Convention.

Cannabis and cannabis resin is also classified within Schedule Four of the 1961 Convention.

[116] New Zealand ratified the "1961 Convention" on 26 March 1963 and made provision in domestic law for obligations imposed by the "1961 Convention".
[117] The "1961 Convention" was the first international treaty to prohibit cannabis.

The Single Convention gives the Economic and Social Council's Commission on Narcotic Drugs power to add, delete or reschedule drugs from the Schedules, in accordance with the World Health Organisations findings and recommendations.

- Convention on Psychotropic Substances, 1971 known as the "1971 Convention".
- Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988 known as the "1988 Convention".

United Nations Drug Control Organisations

The UN organisations that coordinate international drug policy and inform governments of recommended international best practice, policy direction and recommendations, global intelligence analysis and international best practice enable Member States to initiate appropriate drug counter measures.

Figure 42 below depicts the UN organisations that have defined roles within the international drug control system. The UN organisations are:

- The Economic and Social Council assists the UN General Assembly in promoting international, economic and social cooperation and development. Its functions include information collection, advising Member States[118], making recommendations, providing policy coherence and coordinating the overlapping functions of the UN's subsidiary bodies such as the Commission on Narcotic Drugs.

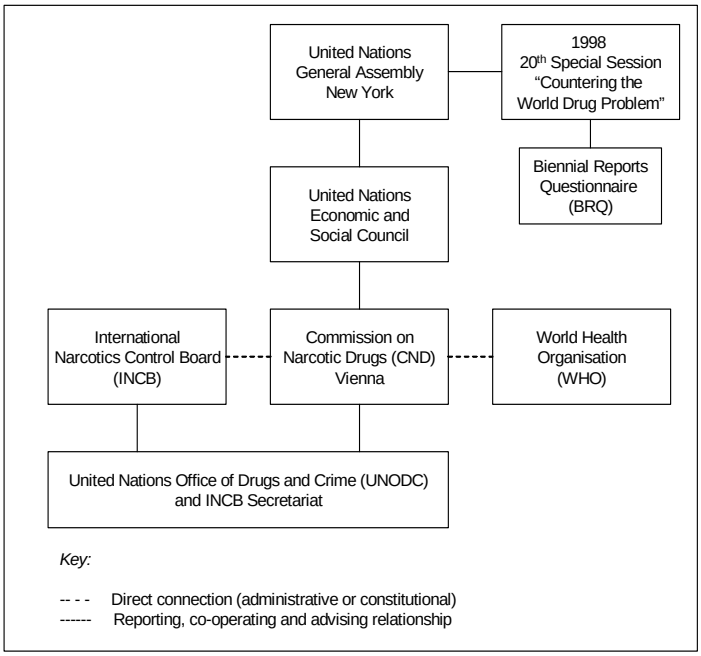


Figure 42: United Nations Drug Control Organisations

- The Commission on Narcotic Drugs (CND) performs functions assigned under the three international drug control conventions including decisions about the ultimate scheduling of substances. The CND analyses the world drug situation and develops proposals to strengthen the international drug control system. The CND also monitors outcomes for the 1998 UN General Assembly 20th Special Session (UNGASS) – *"Countering the World Drug Problem".*

[118] Refers to countries aligned to the United Nations as either members or observers.

- The International Narcotics Control Board (INCB) is an independent and quasi-judicial control organ for monitoring the implementation of the UN conventions. The INCB performs a number of functions including reporting annually on the state of the world drug abuse problem from information provided by Member States. New Zealand, as do many other countries, periodically faces criticism for perceived failures. For example, New Zealand has been consistently criticised for high levels of cultivation and use of cannabis and more recently high levels of production and consumption of methamphetamine.

- The United Nations Office of Drugs and Crime was established in 1997. It has its headquarters in Vienna and twenty-one field offices that include a Regional Centre for East Asia and the Pacific situated in Bangkok, Thailand. The UNODC is mandated to assist Member States in their struggle against illicit drugs and terrorism. The UNODC work programme includes:

    I. Research and analytical work to increase knowledge and understanding of drugs and crime issues and expand the evidence-base for policy and operational decisions;

- The World Health Organisation Expert Committee on Drug Dependence (WHO Committee) is responsible for reviewing psychoactive substances from a medical and scientific perspective. It makes recommendations to the CND about the level of international control or classification within a particular schedule of a convention.

APPENDIX II 1998 UNITED NATIONS GENERAL ASSEMBLY, NEW YORK (20th) SPECIAL SESSION (UNGASS) – COUNTERING THE WORLD DRUG PROBLEM

In 1988 the United Nations undertook a bold new initiative to address the global illicit drug problem. The 20th Special Session of UNGASS) called for significant progress towards reducing illicit drug production, trafficking and abuse worldwide within a ten-year timeframe. Five year (2003) and ten year (2008) target dates were set to reduce the supply and demand for illicit drugs. UNGASS encouraged member states to prepare a ten year conceptual framework to counter illicit drugs.

New Zealand, as a signatory to the 20th Special Session of UNGASS, endorsed the following:

- Political Declaration. All member states, including New Zealand, expressed concern about the serious world drug problem and endorsed a twenty point Political Declaration of enhanced action to tackle the global drug problem in a spirit of trust and co-operation. The declaration included the following points:

  3. Reaffirm our support for the United Nations and its drug control organs, especially the CND, as the global forum for international cooperation against the world drug problem and resolve to strengthen the functioning and governance of these organs.

  17. Recognise that demand reduction is an indispensable pillar in the global approach to countering the world drug problem…; and,

  18. Reaffirm the need for a comprehensive approach towards the elimination of illicit narcotic crops in line with the Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and Alternative Development…

- Declaration of Guiding Principles of Demand Reduction. Creates a balanced approach (at the international level) which, for the first time, addresses the responsibility of nations where consumption is a problem as well as that of that of nations where production is a problem. The UN Conventions, by design, concentrated primarily on supply control which left the implementation of demand reduction initiatives to domestic jurisdictions. Demand reduction was identified as a gap in the international drug control system.

- Measures to Enhance International Co-operation to Counter the World Drug Problem. This document includes an "Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development". There are five objectives to ensure the effectiveness of the common endeavour to reduce the illicit production of narcotic drugs and psychotropic substances which included:

I. The Need for a Balanced Approach to Confront High Levels of Illicit Cultivation

The Challenge noted…*"despite the adoption of international conventions promoting the prohibition of illicit drug crops, the problem of the illicit cultivation of the opium poppy, the cocoa plant and the cannabis plant continues at alarming levels.*

History has shown that there is no single response to reducing an eliminating the cultivation and production of illicit drugs.

Balanced approaches are likely to result in more efficient strategies and successful outcomes".

In a Statement made by the UN Secretary General to the 20th Special Session of the General Assembly Mr Kofi Annan stated:

"It is my hope that when historians study the work of humankind in the field of drug control, they will write about (the 20th Special Session of UNGASS) as the point where this trend was reversed. It is my hope that they will record this as the time when the international community found common ground in the mission to create momentum towards a drug free world in the 21st century. Young people need their leaders to take action, together, to counter the production, trafficking and abuse of illegal drugs".

In summary the 20th Special Session of UNGASS enabled a more realistic "balanced approach" at the international level and essentially served as international best practice for member states to incorporate, as deemed appropriate, within domestic drug policy and drug control frameworks. In 2002 the goals and outcomes of the 20th Special Session of UNGASS were further strengthened when the UNODC developed one of its main Operational Priorities *"to balance supply and demand reduction considerations in its operations".*

During the 50th Session of CND 50 in 2007 the Executive Director of the United Nations of Drugs and Crime (UNODC), Mr Antonio Maria Costa referred to the:

"Inspirational principles of the 20th Special Session of UNGASS" which had as its aim *"toward a drug free world which whilst ambitious, remained relevant and noble as humanity's other aspirations"* and *"was a goal CND aspired to"*.

The 20th Special Session of UNGASS promoted a "balanced approach" at the international level and essentially served as international best practice for member states to incorporate, as deemed appropriate, within domestic drug policy and drug control frameworks.

In 2002 the goals and outcomes from the 20th Special Session of UNGASS were further strengthened when the UNODC developed as one of its main Operational Priorities "to balance supply and demand reduction considerations in its operations.

New Zealand has not prepared a ten year conceptual framework as recommended by the 20th Special Session of UNGASS.

The 20th Special Session of UNGASS was acknowledged within the National Drug Policy 2007-2012; however aspects of the Political Declaration, the Declaration of Guiding Principles on Demand Reduction and Measures to Enhance International Cooperation to Counter the World Drug Problem have not been fully embraced.

APPENDIX III COMMISSION ON NARCOTIC DRUGS (CND): RESOLUTIONS – CANNABIS

Since 2002 a number of cannabis related resolutions have been introduced and adopted by CND. During the 45th Session of CND in 2002 a Resolution (45/8) concerning *"The control of cannabis in Africa"* was introduced and adopted. The following two resolutions are also outlined;

47th CND Session Resolution 'Control of, Cultivation of and Trafficking in Cannabis'

General Assembly Resolution (59/160) was noted during the 47th Session of CND in 2004 and the following points, amongst others, were highlighted:

- Concern that, of all the substances listed in international drug control treaties, cannabis is by far the most widely and most frequently abused, especially among young people.

- Concern also that the abuse of cannabis, especially among young people, often leads to risk taking behaviour.

- Taking note of the report of the INCB for 2003 confirming that the production of, trafficking in and abuse of cannabis continued to pose a serious problem in various regions of the world.

- Requests the United Nations Office on Drugs and Crime…to begin a global survey of cannabis, initially with a market survey, before the 48th Session of CND.

- Encourages member states with experience and expertise in the eradication of illicit drug crops and alternative development programmes to share their experience and expertise with affected States – New Zealand could provide assistance and expertise to Pacific Island nations.

- Encourages member states to apply new strategies and tools to compliment existing ones in efforts to combat trafficking in cannabis.

49th CND Session Resolution 'Using Alternative Development Programmes to Reduce the Cultivation of Cannabis'

During the 49th Session of CND in 2006 a Resolution (2006/31) was adopted in which the following points, amongst others, were noted;

- Recalling the Political Declaration adopted by the General Assembly at its 20th Special Session in which member states recognised that action against the world drug problem was a common and shared responsibility.

- Recalling the General Assembly Resolution (59/160) concerning the "Control of, cultivation of and trafficking in cannabis" and the CND Resolution (45/8) on the "Control of cannabis in Africa".

- Noting the progress made by the UNODC and the forthcoming release of the market survey on cannabis requested by the General Assembly (Resolution 59/160).

- Noting that cannabis is by far the most widely and most frequently abused of the drugs listed in the international drug control treaties.

- Calls upon member states and invites organisations with experience and relevant expertise in the eradication of illicit crops to share that experience and expertise, upon request, with states seeking to develop and implement eradication programmes with a view to reducing the cultivations of cannabis plants, (especially in Africa) and requests the UNODC to facilitate efforts in that regard.

- Urges member states in which the large-scale cultivation of cannabis plants is taking place to carry out, as a matter of priority and as appropriate, a comprehensive assessment of the extent of such cultivation and to use that assessment to inform both eradication and alternative development strategies with a view to further reducing the supply of cannabis.

APPENDIX IV INTERNATIONAL NARCOTICS CONTROL BOARD – CANNABIS

The INCB examines the functioning of the international drug control regime, identifies shortcomings[119] in the implementation by Governments of the three main United Nations Conventions, compliments Governments on drug control initiatives implemented, reports annually on the state of the world drug abuse problem and formulates recommendations for further action to national drug control agencies and relevant international and regional organisations.

Since the late 1990's increasing global cannabis issues reported to the INCB together with other international law enforcement intelligence reporting has resulted in specific cannabis related commentary:

- In 2000 the INCB issued a warning that *"…all Governments should continue to emphasise the dangers of cannabis abuse and take positive steps to prevent the development of permissive attitudes towards its use' noting 'the THC content was getting stronger"*[120].
- The INCB 2003 Annual Report noted that *"…the production of, trafficking in and abuse of cannabis continued to pose a serious problem in various regions of the world[121]".*

Recent commentary in relation to New Zealand included:

- *"The illicit cultivation and abuse of cannabis continue to be serious problems in Oceania; including New Zealand".*
- *"The illicit cultivation and abuse of cannabis continue to be prevalent in most countries in Oceania including New Zealand' but also noted 'the majority of cannabis users were between 15 and 24 years of age".*
- *"Cannabis continued to be to be abused in many countries in Oceania and remained the drug of choice in New Zealand".*
- *"In New Zealand the large scale cultivation of cannabis plants is taking place in a number of rural areas including Northland and the Bay of Plenty. In addition outdoor cultivation of cannabis plants in New Zealand has recently been supplemented by operations that use sophisticated indoor hydroponics to produce cannabis".*

[119] In some cases the perceived shortcomings can be a critical commentary within the INCB Annual Reports.
[120] INCB Annual Report 1999 from Drug Affliction – What You Need to Know, Dr Ian Oliver, 2006.
[121] International Narcotics Control Board Annual Report 2003.