



# THE JOURNAL OF GLOBAL DRUG POLICY AND PRACTICE

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*Evolution of Drug Policy*

In this issue, the drug policy of three countries will be examined, as subject matter experts outline the evolution and history of drug policy from the middle of the 19th century to the present. In detail, the drug policies of Sweden, the Netherlands, and Canada, are explained and explored. Historically, in these countries, drug policies have been less restrictive compared to other Western and/or European countries. The authors will offer specific examples of the history of this trend and how it has impacted society, and how drug policies changed or are evolving.

The Swedish approach to drug policy, which is relatively successful, has been restrictive but not repressive. In Sweden, a great majority of public opinion supports a restrictive and balanced policy that includes law enforcement as well as good access to treatment for those who need it. In the Netherlands, there is a shift from a more libertarian, almost laissez faire, policy to a somewhat more restrictive approach that is more in accordance with foreign drug policies. Canada, as mentioned in this issue's commentary, had the first supervised injecting facility in North America. However, as the analysis of a Lancet study points out, there are questions about whether this approach saved lives.

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## The Swedish Drug Policy Experience: Past to Present

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### Abstract

Sweden has a unique history when it comes to drug policy. It was one of the first countries in Western Europe to be afflicted by the modern drug epidemic. Initially Sweden dealt with the problem in a permissive manner, which included a period of legal prescription of drugs between 1965 and 1967.

The turn-around in drug policy was initiated by the Stockholm-based psychiatrist Nils Bejerot, who analyzed the situation and proposed an alternative drug policy. Gradually the drug laws were tightened so there wasn't any legal free-zone for possessing or consuming illicit drugs. However, the legal consequences are relatively mild.

The results of Sweden's balanced and restrictive policy are that Swedish youth use illicit drugs at a very low level in a European context. Sweden has shown that it is possible to combine a modern welfare state with effective methods to prevent non-medical drug use.

Sweden's history of drug abuse began in the late 1940s when abuse was limited to a few bohemian circles in Stockholm. As more young people were introduced to nonmedical drug use in the early 1960s, Sweden became one of the first countries in Western Europe to experience a large-scale drug problem among its population, creating the Swedish drug epidemic.

During this time, the illegal drug market in Sweden was dominated by stimulants of the amphetamine-type. Because these drugs were seen as non-addicting and had widespread clinical use at the time, it is not hard to understand why many Swedish physicians were attracted to the idea of prescribing these drugs to patients to keep them from obtaining them through illegal sources. This idea was quickly adopted by some health and law enforcement authorities. Between 1965 and 1967 nonmedical drug users in Stockholm could obtain their favorite drugs, which could include stimulants as well as opiates, with a prescription from a handful of doctors who took part in a special program sanctioned by the National Board of Health. More than 4 million doses were prescribed for the initial 110 drug-addicted patients enrolled in the program. Out of those, about 3.4 million doses were stimulants; the remaining were primarily opiates. Unsurprisingly, a large percentage of these legally prescribed drugs were resold or given away, flooding the city with drugs and spreading the drug epidemic in Sweden rather than limiting it as the program's sponsors naively expected. This legal prescription experiment came to an abrupt end in June of 1967 two years after it started, following the tragic and widely publicized death of a 17 year-old girl who had been offered drugs by one of the patients in the prescription program.<sup>1</sup>

As a psychiatrist working with the Stockholm police, Nils Bejerot was one of the few physicians in Sweden with firsthand professional experience of the impact of drug addiction. Bejerot's work with criminals since the 1950s in Stockholm gave him a unique perspective with regard to the National Board of Health's drug policy experiment. By offering his expertise and experience to the authorities, he tried to stop this legal prescription experiment, but to no avail. Out of frustration and in the hopes that this initial experiment would not continue, in 1965 he initiated a study of drug injection marks among arrestees at the Remand Prison in Stockholm. He later linked the changes in the frequency of injection marks to the changes in the Swedish drug policy.<sup>2</sup> In 1969 he founded the National Association for a Drug-Free Society (abbreviated RNS in

Swedish) to promote the idea of restrictive drug policy by educating both the public and his medical colleagues.

Initially, Bejerot's views on drug policy were not universally accepted in Sweden. There was a strong counterargument, based on the belief that medicalizing nonmedical drug use would, not only reduce drug use but also reduce the many serious and even fatal problems created by drug use. This view was attractive to many Swedish health officials because it appeared to be more compassionate and humane. During the 1970s the debate about drug policy in Sweden picked up momentum gradually. Official drug prevention policy at that time directed the police to concentrate on trafficking and smuggling and not on arresting the drug users for drug possession and street peddling. The presumption was that this would make it more attractive for them to voluntarily seek treatment and other help from social services providers or hospitals. During those years in Sweden it was legal for drug users to possess up to 20 grams of hashish for personal use. Naturally the street pushers never had more than this legal limit. This legal practice was criticized by Bejerot and RNS for several years. Public debates, demonstrations and media debates were organized and finally achieved results. The Swedish Prosecutor General issued a directive to all prosecutors in January 1980 that waivers of prosecution for small amounts of narcotic drugs would no longer be allowed. Overnight, this announcement changed Swedish drug policy as a practical matter. This was the tipping point: Swedish drug policy then changed from permissive to restrictive, continuing along this path to the present time.<sup>3</sup>

Based on this newly articulated drug policy, the Swedish police changed its priorities to focus on small crimes of possession, making small-scale trafficking of drugs a much riskier business. Unsurprisingly, the number of drug crimes rose initially while at the same time drug use surveys showed a consistent decline all through the 1980s. During those years, Sweden's economy thrived. The city councils were generally willing to fund drug treatment, and anti-drug prevention activities in schools. The general debate in society about drug policy receded as all parties adopted the restrictive policy, which was an inspiration to all professionals working with the drug problem.

In 1983 the Supreme Court of Sweden ruled that the Narcotic Drugs Act did not cover the act of consuming illegal drugs. Simply speaking, it was forbidden to have any drug of abuse in your possession, but it was not illegal to smoke, eat, inhale, or inject drugs. The following year RNS began campaigning to make the consumption of illegal drugs itself a crime. An opinion poll in 1984 showed that 95% of the public were in favor of this change in the law. The debate went on for several years, engaging all of Sweden's political parties in the Parliament. In 1988 the Swedish law was changed so that consumption of narcotic drugs was made illegal. Initially the law did not allow the police to take a urine or blood test as evidence of use. The law was rewritten in 1993 so that the police could use drug tests for evidence of drug consumption.<sup>3</sup>

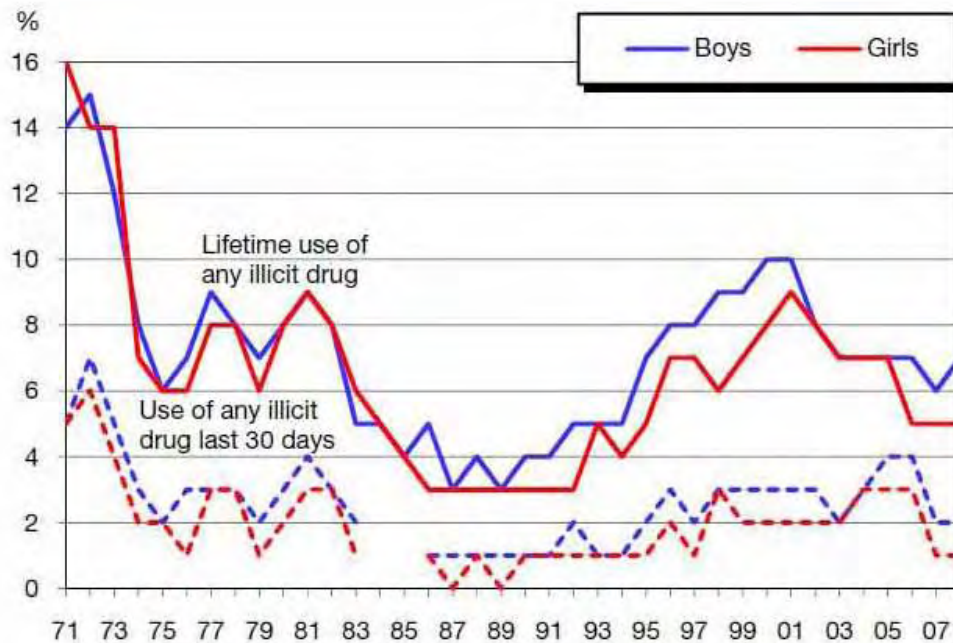
Today approximately 35,000 drug tests are taken yearly by Swedish police based on suspicion of illegal consumption. Over 10,000 tests are taken on suspicion of drugged driving. The punishment for illegal consumption is a monetary fine related to the offender's income. Drugged driving can lead to imprisonment, depending on the circumstances. During 2010 the number of crimes classified as illegal consumption was 51, 766. The total number of reported drug crimes was 102, 655.<sup>4</sup>

If the 1980s were the Golden Age of drug prevention in Sweden, then the 1990s were the Dark Age. Sweden was hit by a severe economic crisis in the early part of the decade, a crisis that took the rest of the decade to sort out. Virtually all segments of Swedish society experienced an economic decline, or ground to a halt. Since the drug problem was at such a low level at the beginning of the 1990s, especially among the young, drug policy did not receive much attention from those with political power. As a consequence, anti-drug efforts declined in the 1990s, and drug treatment became much harder to obtain. For these same economic reasons schools did not focus on the drug problem in the 1990s. It is not surprising that drug abuse levels in Sweden went up during this decade, although they never again reached the levels seen in the late 60s and early 70s. However, by the end of the 90s, drug abuse escalated enough so that Government took action to reverse this trend.

In 1998 the Government appointed a Narcotics Commission which encouraged action and promoted change. As the general debate about the drug problem heated up, Government funding became available for various

types of projects. During the first years of the new century the rise in illegal drug use rates among the young flattened out and gradually declined (see Figure 1).<sup>5</sup>

Figure 1.

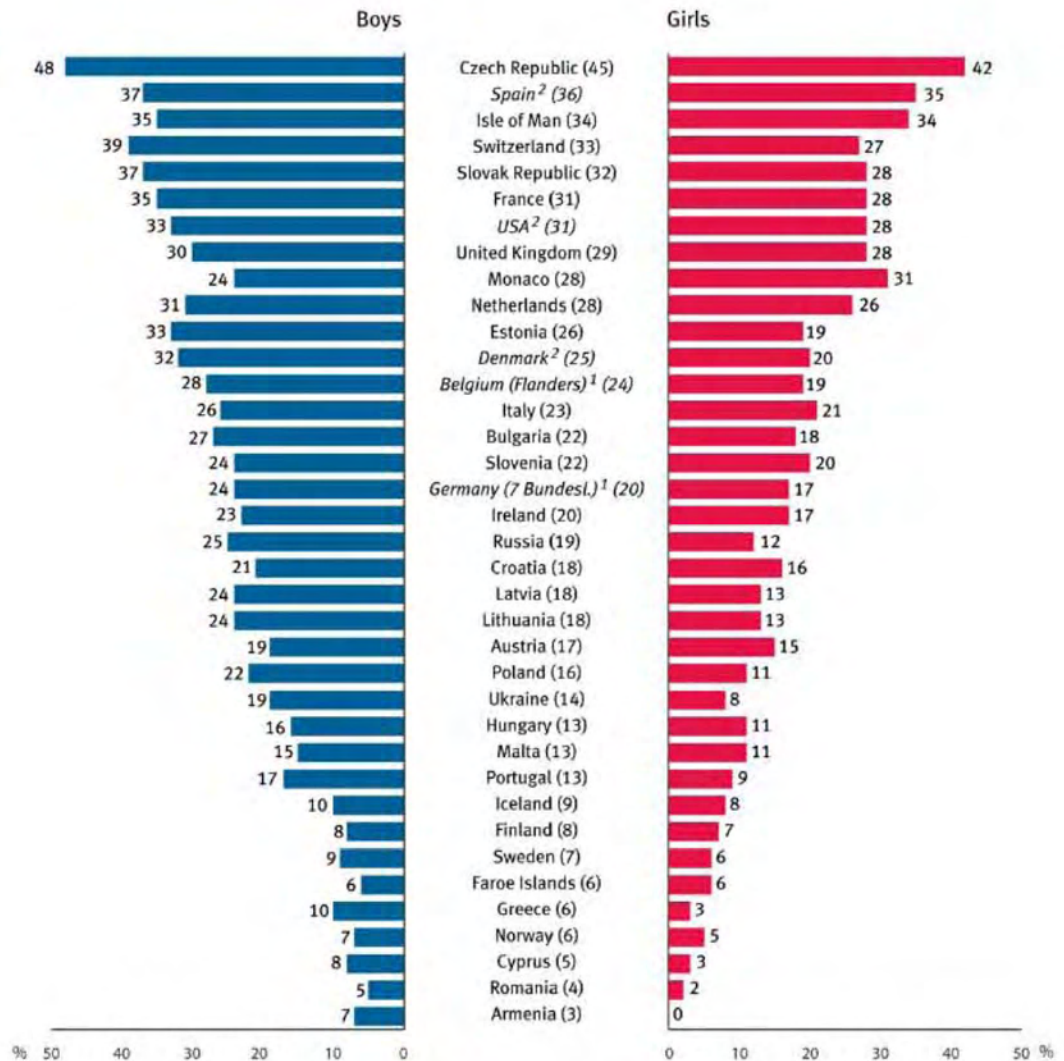


**Lifetime use of any illicit drug and use of any illicit drug last 30 days (data not available 1983–1985), by gender. 1971–2008.**

**Source:** Hvitfeldt T and Nyström S (2009). *Skolelevers drogvanor 2008*. Swedish Council for Information on Alcohol and other Drugs. Stockholm, Sweden.

There are many in Sweden who believe that further challenges exist, in the nation's efforts to curtail illegal drug use. However, with unusually low rates of drug use, Sweden compares very favorably to other developed nations. Since 1971 the Swedish Council for Information in Alcohol and other Drugs (CAN) has administered drug use surveys to teenagers during the year of their 16<sup>th</sup> birthday. The model used in these surveys was adopted from a European survey conducted in 1995 in 26 countries, the European School Survey Project on Alcohol and other Drugs (ESPAD). The latest ESPAD survey was presented in February 2009 and shows data from 2007 (see figure 2).<sup>6</sup>

Figure 2.



**Lifetime use of marijuana or hashish by gender. 2007.**

- 1) Belgium and Germany: Limited geographical coverage.
- 2) Denmark, Spain and USA: Limited comparability.

**Source:** Hibell B, Guttormsson U, Ahlström A, Balakireva O, Bjarnason T, Kokkevi A and Kraus L (2009). *The 2007 ESPAD Report. Substance Use Among Students in 35 European Countries*. Swedish Council for Information on Alcohol and other Drugs. Stockholm, Sweden.

Figure 2 shows a comparison among self-reported lifetime marijuana and hashish use by 16 year olds from 35 European countries. The reported drug use of boys can be found in the left-side graphs, while the reported drug use of girls appears in graphs on the right. The average of the reported use of the boys and girls combined can be found as a number to the right of the country name. The differences in self-reported use of cannabis are very large between the European countries with the lowest and the highest prevalence levels. Several comparisons of other countries with Sweden are of interest. There is a striking difference between Sweden and the United Kingdom even though the modern drug epidemic started at about the same time in both countries and even though both are liberal welfare states with high levels of economic

development. In another comparison, it is interesting to note the reported drug use between teenagers in Sweden and in The Netherlands. During the 1970s Sweden, after a heated internal debate, began enforcing stricter drug laws. The Netherlands in 1976 decided to go the opposite way by passing the Opium Act, making a distinction between the permissive enforcement of *soft* drug use and a more restrictive enforcement of *hard* drugs.<sup>7</sup>

It is helpful to consider the impact of significant change in a country's political structure and the resulting impact on drug policy when viewing these data. For example, a number of these countries endured harsh and repressive dictatorships. It can be inferred that since some of these countries became democratic, such as the Czech Republic, Slovak Republic, Spain, and Estonia, they included the choice to use illegal drugs in their concept of freedom. However this is not a uniform experience, since other countries, such as Greece, with a similar historical experience, maintain a restrictive drug policy and experience low levels of teenage drug use. Portugal, which became a democracy in 1974, adopted a less stringent policy, with resulting reported teenage use approximately midway between the data reported by teens in Spain and Greece. From this ESPAD scale it is possible to infer the presence of quite permissive drug policy associated with the increased prevalence levels of illegal drugs.

The authors of the ESPAD-survey concluded in their summary that in the 2007 data there are apparent associations between the aggregated use of different substances at the country level. In countries where teenagers drink more, they also tend to use illegal drugs more.<sup>6</sup> A nation's drug policy reflects a cultural set of values, beliefs, and behaviors; and its associated laws result in normative actions by its citizens. People, especially young people, adapt quickly to laws that impact on behavior related to the use of illegal drugs.

One of the common stereotypes in global drug policy debates is that successful welfare states adopt permissive drug policies as part of their commitment to compassion and tolerance of diversity. Sweden, a country noted for its liberal views, stands out as an exception to this stereotype and offers a model for a more restrictive drug policy, not because it is repressive politically but because it promotes the public health, thereby lowering drug use and its associated harms. Unfortunately there is no universally accepted standard model for comparing countries as to the level of their drug problems. United Nations Office on Drugs and Crime, UNODC, did however make a comparison between Sweden and other EU-nations in 2006 named *Sweden's Successful Drug Policy: A Review of the Evidence*. Executive Director Antonio Maria Costa writes in the Preface: "It is my firm belief that the generally positive situation of Sweden is a result of the policy that has been applied to address the problem. The achievements of Sweden are further proof that, ultimately, each Government is responsible for the size of the drug problem in its country. Societies often have the drug problem they deserve."<sup>8</sup>

## Conclusion

The Swedish approach to drug policy has been restrictive but not repressive, which is an important distinction. In Sweden, The prison population rate (prisoners per 100 000 inhabitants) is 74, which is well below the median rate for western and southern Europe at 95. The rate for The Netherlands is 100, a difference to Sweden many would think to go the opposite way.<sup>9</sup>

The focus on the consumer end of the illicit drug market, in line with the analysis Bejerot presented in the late 1960s, is most likely the reason why Sweden's drug policy has been comparatively successful. There is no legal free zone in Sweden when it comes to illicit drugs. The legal consequences are not harsh, but they exist, and are for real. The debate about drug policy has gone back and forth for over four decades and has involved almost all levels of society. A great majority of public opinion is behind a restrictive and balanced policy that includes law enforcement as well as good access to treatment for those who need it. However, Sweden is not an island and is an important part of the international community. In the area of drug policy and related issues, Sweden's future remains to be seen.

### Author Information

Per Johansson graduated from a teacher's college in Stockholm in 1978, then got into the construction business and worked with various projects during the 1980s.

In 1979, Per Johansson came in contact with RNS (National Association for a Drug-free Society) and met Nils Bejerot, who founded the organization. He became an enthusiastic volunteer and devoted much of his free time working for RNS.

Since the early 1990s he has been working full time for RNS as Secretary General and represents the organization at media opportunities. He is responsible for their production of books, magazine and other printed matters. He has been involved in our international projects, mainly in former Soviet Union countries. Together with his (few) colleagues at their office, he organizes seminars on various topics related to the drug problem. In the last few years their main focus has been to introduce random student drug testing in Sweden. They have learned much from the US experience and their work in Sweden is proceeding.

In September 2008, he took part in organizing the First World Forum in Stockholm. This prompted four of the Swedish NGO organizers to found World Federation Against Drugs, WFAD, in 2009. One of the main activities of WFAD is to organize Forums. The second was held in May 2010 and the third will be held in May 2012.

### Conflict of Interest

I declare that I have no proprietary, financial, professional or other personal interest of any nature or kind in any product, service and/or company that could be construed as influencing the position presented in, or the review of, the manuscript entitled: The Swedish Drug Policy Experience: Past to Present

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## Going Dutch: Recent drug policy developments in the Netherlands

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### Abstract

This article will try to clearly show that though the basic principles of the Dutch drug policy are upheld, there is a shift from a more libertarian, almost laissez faire, policy to a somewhat more restrictive approach that is more in accordance with foreign drug policies. Two recent advisory committees have guided the Dutch government to conclude that the way the Netherlands has dealt with cannabis and coffee shops needs to be changed.

### 1. Introduction

The Dutch drug policy, which for years was viewed as liberal and was used as a positive example by many, is changing its direction and moving to a more restrictive policy. Trending toward more restrictions on coffee shops, cannabis use, and hemp cultivation and trade, the Netherlands is retracing its steps. Some are even asking whether the famous Dutch condoning policy on drugs might soon end. *Condoning*, in the Dutch context, especially regarding drugs, refers to when the government consciously takes no action when rules are breached, then further (on conditions) the government announces that against such breach, no action will be taken. Or, to put it more paradoxically, 'to tolerate formally what formally is forbidden'.

A couple of years ago, at an international conference on drug addiction in Mexico, *Hans Hoogervorst*, the then Dutch Minister of Health, stated that the present trend of a more restrictive drug policy in the Netherlands would be continued. And he predicted that in about ten years' time the Dutch drug policy would not substantially differ from the drug policies of other European countries [1]

Developments since then seem to back up this prophecy. Two examples:

1. In May 2008 the biggest coffee shop in the Netherlands, 'Checkpoint' in the city of Terneuzen, on Belgium's border, was closed down. It became too successful. Discovered in this coffee shop was nine times as much cannabis as is officially allowed, more than 4.5 kilos of so called soft drugs, where the maximum is 500 grams. Another 96 kilo's was discovered in a warehouse, and 160 kilo's at thirteen supply locations. Checkpoint and one other coffee shop, welcomed 2300 to 2900 visitors each day, predominantly from Belgium (40 percent) and France (50 percent). At 'high times' that could be 5000 visitors. If every visitor were to buy the maximum customer amount of five grams, that would mean the coffee shop should have 25 kilo's in storage, which is forbidden. In order to comply with the condoning rules, to keep its storage of cannabis at the maximum allowed level of 500 grams all day, the coffee shop would have to replenish its store every 30 minutes. The foreign drug tourists praised the good and constant quality of the 'Netherweed', sold at the five office windows. Customers had to take numbers before standing in line. According to the mayor of the city, Jan Lonink, the situation of so many visitors to the coffee shops, and so much cannabis sold per day, could no longer be reconciled with condoning. "Condoning is only possible when it is limited as to size and time", he said. According to him, the condoning policy is bankrupt. He therefore made a plea for experiments with governmentally controlled cannabis cultivation. [2]
2. The Dutch government set up a task force to crack down on marijuana cultivation in the country. To fight organized crime involved in the production of the drug, the task force united the police with national and local authorities. The ministry of Justice hopes to significantly reduce this organized crime, by tracking down, arresting and dismantling criminal networks

For many, coffee shops are the most well-known feature of the Dutch drug policy. The number of coffee shops has been declining for many years. When the present Dutch government has its way and puts its plan into effect – f.e. establishing a rule that enforces a distance of at least 350 meters between a coffee shop and a school – six of the ten coffee shops will be forced to close. In Amsterdam, of the current 223 coffee shops, 187 would have to close their doors. Further, the intention of the government is to turn coffee shops into private clubs where only Dutch residents are allowed entrance. They will only be able to buy hash and weed with an ID card.

The new direction of the Dutch government was primarily instigated by an extensive evaluation in 2009 of the status quo of the Dutch drug policy. This evaluation was the first since the presentation of a 1995 Drugs Policy Paper '*Het Nederlandse drugsbeleid, continuïteit en verandering*' ('The Dutch drug policy, continuity and change') [3]. Since then, new national and international developments in the field of drugs and addiction have occurred. In 2008 the Dutch House of representatives debated with the government on drugs policy, and questioned if the Dutch drugs policy was still up to its task. The government and House of Representatives agreed to draft a new policy document on drugs.

At the instigation of the government, the *Netherlands Institute of Mental Health and Addiction* (Trimbos Instituut) and the *Research and Documentation Centre* of the Ministry of Justice, undertook an evaluation of the last 15 years. The publication '*Evaluatie van het Nederlandse drugsbeleid*' ('Evaluation of the Dutch drugs policy'). [4] was the result, and served as the basis for recommendations made by an advisory committee on drugs policy (the so called *Van de Donk Committee*), established by the Minister of Health Welfare and Sport, the Minister of Justice, and the Minister of the Interior and Kingdom Relations, [5] It was the aim of the committee to advise the government – on the basis of the said evaluation – on the future of the Dutch drugs policy. The study was to clarify the extent to which the main objective of Dutch national drug policy had been achieved. The objective of the Dutch drug policy, as formulated in the 1995 Drugs Policy Paper, was the protection of public health; specifically the prevention and management of the threats to individuals and society that ensue from drug use. The *Van de Donk committee* presented its results to the government in July 2009. [6] Originally the aim of the ministers was to issue a drugs policy document later that year, based partly on the committee's recommendations, in which they would set out the government's plans. However, the fall of the government in 2010 prevented that outcome. The present government's policy on drugs now seems to build on these documents.

In the summer of 2011 another expert committee, the *Garretsen Committee* [7], presented a report to the Dutch government [8], in which it made the following recommendations, among others: 1. The list system of the Dutch Narcotics Law, namely two lists, doesn't need modification; 2. An optimization of the operation of the Opium Act by: a. setting up a 'check point' in order to monitor new drugs; b. strengthening the distinction between hemp on the two lists (Schedule I and Schedule II) of the Opium Act, based on the THC content, by moving hemp and hashish with a THC content of more than 15% to Schedule I (and *de facto* define it as a hard drug) and on Schedule II, only hemp and hashish with a THC content of a maximum of 15%. In October 2011, the Dutch government officially agreed with these recommendations. It means that on trade, import and export of heavy cannabis (so, with a THC percentage of more than 15%), higher penalties are applicable. Coffee shops will be checked randomly.

In this article I will give a short survey of the characteristics of the Dutch drug policy (§2). Next, I will discuss the present figures on drug and alcohol use in the Netherlands (§3). And finally, I will provide an evaluation of the present Dutch drug policy. (§4). Of course, the reader should realize that not all aspects of the Dutch drug policy can be dealt with *in extenso* in this article. [9]

## 2. A short survey of the Dutch drug policy

*'Cornelis is reading to his wife. This chapter of Genesis always moves him. Also his land was once flooded. Tidal waves swallowed the land, but by the will of God the people of Holland conquered it back from the sea; they won it back and created an earthly paradise. Fertile ground, beautiful cities, a peaceful, tolerant land, where the different religions could co-exist, Anabaptists and Catholics, protestants and Jews, the lion lying next to the lamb. How fortunate they are, and how fortunate he is. [10]*

The evolution of the Dutch drug policy since the seventies of the previous century treads the Dutch cultural path followed for centuries, one of tolerance, pragmatism, realism, live and let live, and compromise, i.e. an aversion to polarized positions. The quote above is taken from a novel, dating back to the thirties of the 17<sup>th</sup> century, an age when the Netherlands was a very affluent country. The 17<sup>th</sup> century was the Golden Age, economically, socially, and culturally. Even then, Holland, another name for the Netherlands, was regarded as very tolerant. Others would claim, however, that tolerance was just a pragmatic way of dealing with things, without moral considerations. This amoral, pragmatic way, according to these critics, applies equally to the way the Dutch deal with drugs.

In this paragraph we will paint a picture of the history of the Dutch drug policy (§2.1) and its main characteristics (§2.2). Finally, we will deal somewhat more extensively with the Dutch coffee shop policy (§2.3).

## 2.1 History

The current Dutch drug policy began in the 1960s and the beginning of the 70s. During that time, things changed dramatically in the Netherlands. The use of cannabis – ‘soft drugs’ – among young people increased on the waves of the so-called hippie movement. Within this movement, the use of cannabis was intended to be a form of dissociating oneself from the predominant materialistic culture. Drug use increased, especially the use of cannabis, LSD and, to a certain extent, opium.

The views on cannabis were part of a broader discussion at the time (1965-1976) on whether, and if yes, how far a government could act as a moralist. How the right to self-determination of the individual citizen could be shaped vis-à-vis the government was the focus of the discussions. Subjects, such as pornography, prostitution, abortion, euthanasia *and*, of course, drugs were on the table. The overriding consensus was that morality and criminal justice shouldn't be combined. Victimless offences should be decriminalized. One has to remember that in the beginning of the seventies, information was scarce on the possible psychic and physical complications associated with cannabis use. Because of this, the predominant opinion was that the dangers of cannabis should not be exaggerated.

The ‘condoning attitude’ was strengthened when, in the summer of 1972, heroin flooded the Dutch market and subsequently thousands were hooked. Within a very short time the attention of the government was diverted from problems regarding cannabis use to problems surrounding the heroin trade. This simultaneous rise of cannabis and heroin consumption had a major influence in changing the Dutch narcotics law in 1976 and the condoning practices that followed. The threat posed by the heroin scene was being used as an argument for the decriminalization of cannabis. On the basis of the social stepping stone theory; criminalization of the cannabis users would lead to their further involvement with deviant subcultures and to more excessive use of other, more dangerous drugs. The aim was for a so called ‘separation of the markets of hard and soft drugs’. Instead of the moral argument, the rational argument was played; cannabis and heroin shouldn't be regarded at the same level.

On the basis of recommendations by formal committees, in 1976 the Dutch Narcotics Act (Opium Act of 1919; amended in 1928) was again amended. [11] The Narcotics Act regulates the production, distribution, and consumption of ‘psychoactive’ substances. Possession, commercial distribution, production, import and export, and advertising the sale or distribution of all drugs was made punishable by law. Since 1985, this also covered activities preceding trafficking in hard drugs. The *use* of drugs was not punishable by law. Activities relating to soft drugs and hard drugs for medicinal and scientific purposes were allowed under the condition that the Minister of Health, Welfare and Sports would grant special permission. The government now made a legislative distinction between drugs that involved unacceptable risks, i.e. hard drugs, and those drugs that involve acceptable risks, i.e. the hemp products. [12]

Cannabis use and small scale selling were decriminalized. Officially, the possession of soft drugs was – and still is – punishable by law. However, it was no longer characterized as a criminal offence but as a misdemeanor. The Dutch government expected at that time that other countries would soon see the wisdom of this approach. This proved to be a miscalculation. As the other countries did not decriminalize cannabis, the condoning policy that was intended to be temporary now became permanent. In 1980 the first coffee shop was set up. The Netherlands never foresaw this ‘commercialization’ of the selling of cannabis, and was

naively unaware of its potential profitability. Commercial motives became increasingly more important than other considerations, such as health impacts.

The 1995 Policy Paper 'Continuity and Change' [13], though not giving up on the basic premises of the Dutch drug policy, still called for a somewhat more restrictive approach, i.e. a more consequential implementation of the existing rules where it concerned the production, trafficking, and use of drugs. For example cannabis and coffee shop policy was further modified and room was created for more compulsory addiction care. Authorities at the local level were given more legal, administrative, and judicial instruments to help them tackle prevalent local drug crime and drug-related public nuisance. [14]

## 2.2 Characteristics

The word that best exemplifies the drugs policy of the Netherlands is the word 'gedogen'. '*Gedogen*' is the Dutch word used for 'condoning', 'to put up with', a way of adapting to the changing opinions, especially in the field of sexuality and drug use. Basic to its policy are the following principles:

1. The drug policy approach must be realistic, pragmatic and integrated ('soft on soft drugs, hard on hard drugs'), aimed at control
2. Prevention and care (*drug demand reduction*)
3. Fight against organized crime (*supply reduction*)
4. Maintenance of public order (*nuisance reduction*)
5. Emphasis on the value of personal freedom
6. Health protection/Harm reduction

The Dutch drug policy is a combination of prevention, care, combating nuisance, prosecution, and enforcement, surrounding the triplet of demand reduction, harm reduction, and supply reduction. It claims to avoid the Scylla and Charybdis, of rigid deterrence on the one side and rigid legalization on the other. It states that public nuisance should be prevented, every citizen is entitled to live one's life in the way he or she sees fit, and that drug treatment must focus on minimizing the risks intrinsic to the use of drugs. Methadone programs and syringe exchange programs are part of this concept. Abstinence is not an explicit aim. A distinction is made between primary and secondary problems. [15]

At the national level, the responsibility for the Dutch drug policy is shared by three ministries: The Ministry of Health is responsible for coordinating the drug policy, and also carries the main responsibility for the drug prevention and treatment policy. The Ministry of Safety & Justice is charged with enforcement of the law. And the Ministry of the Interior and Kingdom Relations is responsible for matters relating to local government and the police. At the local level there are 'tripartite consultations' between the mayor, the police commissioner, and the public prosecutor. These three parties jointly shape local drug policy on the basis of their individual responsibilities and powers.

## 2.3 Coffee shops

The Dutch drug policy is often (possibly undeserved) equated with its coffee shop and cannabis policy. The main argument for allowing coffee shops was the wish to separate the market of hard drugs from the market of cannabis [16], to combat the marginalization and criminalization of the cannabis user, and to minimize the likelihood that he/she will start experimenting with hard drugs and becoming an addict.

In the 1980's the development of the coffee shops proceeded with minimal intervention by the government. [17] This resulted in an enormous increase in the number of these outlets. [18] In 1991 some formal regulations were enacted. In the 1995 governmental drug note referred to earlier [19], the government confirmed the basic principles of the Dutch drugs policy but also emphasized the enforcement side of the drugs problem. Coffee shops would have to comply with specific regulations. The sale of cannabis in coffee shops was tolerated, provided that they complied with the following criteria: 1. no advertisement; 2. no sale of hard drugs; 3. no nuisance; 4. no sales to young minors; 5. no wholesale trade quantities. [20]

In 1996 the Public Prosecutor published further guidelines: 1. home cultivation was punishable for more than 5 plants inclusive; [21] 2. coffee shops were allowed to have a maximum of 500 grams in stock; 3. coffee shops were prohibited by law to admit minors; [22] 4. a strict separation between the sale of alcohol and cannabis; [23] 5. Mayors received more authority to close down coffee shops, even when there was no

disturbance of the public order. This stronger focus on enforcement had as background the wish to reduce public nuisance, including drug tourism, and to fight the criminality associated with the coffee shops and with the cannabis cultivation.

### 3. Figures

In this paragraph we will summarize the recent data on the use of drugs and alcohol in the Netherlands. [24] We will focus on cannabis (§3.1), cocaine (§3.2), and opiates (§3.3). Other drug developments will also be discussed (§3.4).

#### 3.1 Cannabis

The percentage of current cannabis users among pupils 12-18 years old, declined between the years 1996 and 2007, especially among males. The average percentage was eight percent (10 percent of the boys, 6 percent of the girls). Between 2003 and 2007, the percentage of boys that already experienced cannabis at a young age (fourteen years), dropped from 21 percent to 13 percent. Among girls, this decline was less; from 16 percent to 12 percent. [25] Despite this reverse trend, the percentage of Dutch pupils that have experience with cannabis is relatively high in comparison to pupils in other European countries. [26] The current cannabis use in the general population appears to be stable (three percent). However, there is a substantial increase for all age groups in those who apply for help at addiction care centers because of cannabis problems. Between 1994 and 2008 the number of primary cannabis clients rose from 1,951 to 8,410. [27] Approximately 29,000 persons in the general population meet the requirements for the diagnosis of cannabis dependency, 40,000 meet the requirements for the diagnosis of cannabis misuse. [28]

#### 3.2 Cocaine

As to cocaine use, Dutch pupils were in the mid-range compared to their peers in other countries. In the age group of 12-18 years the 'ever' use declined from three percent to 1.7 percent. Current use remained at one percent. The use of cocaine was (much) higher with those in the general population who go to parties: twelve percent of those who go to parties were current users; five percent would use cocaine that evening. For those who go to clubs and discotheques, the current cocaine use varied between three and six percent. For the average population (15-64 years) the percentage that ever use was 3.4 percent, the current use 0.6 percent.

There was an increase in the requests for professional care for those who were so called primary cocaine clients; from 2,500 in 1994 to 10,000 in 2004. Between 2004 and 2008 the rise did not seem to continue. However, if you look at a longer period of time, there appears to be a gradual rise.

#### 3.3 Opiates

In the Netherlands, in 2007, only 0.8 percent of pupils (12-18 years) had ever experienced heroin, while 0.4 percent said they used in the last month. For the general population, estimates point to an approximate 18,000 problematic opiate users. The average age of these users is rising. In the Dutch addiction care centers the number of clients with a primary opiate problem declined, 18,000 in 2001 to 14,000 in 2004 and to 12,700 in 2008. So, the decrease in the number of opiate addicts is reflected in the decline in the number of opiate clients.

#### 3.4 Other drug use and connected developments

Although there is a decline in *amphetamine* use among pupils, it seems to be gaining popularity with those who go out. The number of clients with amphetamine problems applying for help has tripled and is now almost 1,500 clients. For youngsters and young adults, *Ecstasy* still remains the most popular illegal drug after cannabis, but we do see a downward trend among pupils. How many of them face trouble because of their ecstasy is unknown since the percentage of ecstasy clients in the addiction care centers is small (one percent) and getting smaller.

In recent years, the Netherlands saw an increase of the use of GHB among the general population and among pupils (especially among those pupils who go to specialized educational systems). The number of incidents involving GHB has increased accordingly.

In 2008, 129 drug users overdosed and died (compared to 99 drug users in 2007). Over the last ten years the number of overdose deaths, fluctuated between 100 and 140. However, there are many more deaths associated with tobacco smoking and alcohol use.

The level of criminality in the Netherlands has declined among drug users, especially among those addicted to opiates (thefts, crimes against property), after a long period of high levels of criminality in this group. The same applies to smuggling, trade, and production of illegal drugs. Usually, however, most of the more severe forms of organized crime are usually connected to drugs. And also the number of violent crimes has increased.

#### 4. Evaluation

Forty years after the start of the Dutch drug policy the *Van de Donk committee* [29], concludes that the Dutch drug policy should not be viewed negatively and that perhaps it should be regarded as successful. In spite of this, the committee recognises that there are a number of issues that "are cause for grave concern", and that a number of 'key changes' to the policy are needed. Four of these changes are:

1. *Youngsters*; the committee expresses its concern about the drug use among young people. The committee states that it should be more difficult for young people to come into contact with drugs and alcohol. As a background to this appraisal by the committee is the increase in scientific knowledge about the effects of drugs and alcohol on the developing brains of adolescents – especially those who are disadvantaged.
2. *Coffee shops*; drug use and coffee shops have become too 'normalized', so a more restrictive approach towards coffee shops is called for, explains the committee. The aim of the Netherlands drug policy in the 1970s never had the goal of facilitating the expansion of the multimillion dollar cannabis sales industry. The committee now calls for a return to the originally intended 'small-scale selling', preferably within the setting of a 'closed club'. Within this setting, the committee hopes that the flow of drug tourists coming to the Netherlands might be stopped. Further, the committee questions whether the present system of two lists (for soft and hard drugs respectively) should be continued and if it perhaps would be better to work with one list.
3. *Organized crime*; a major concern for the committee is the threat to society resulting from the activities of organized crime. Organized crime engages in the production of and trade in drugs, therefore one of the aims of the future Dutch drug policy should be to tackle organized drug-related crime, as the committee states, "more intelligently and rigorously".
4. *Drugs authority*; the committee wants to establish a so called *drugs authority*. In matters relating to drug policy, this Authority should play a coordinating role between the local and central government, between the ministries, and between the Netherlands and other countries. It should act as a watchdog to ensure that the Dutch drug policy is further developed and adjusted, where needed.

In its letter of 11 September 2009 the previous government responded to the advice of the committee. Based on the past 15 years and on the Advisory Committee's report, the government describes the implications for the current Dutch drug policy, and that major changes to some elements of this policy are needed. Perhaps as far as health risks and care of addicts are concerned, the policy has been reasonably successful, the government states. But it adds: "Nuisance and drug-related crime place a heavy burden on local authorities, while criminal organisations have found their way to the big money to be made from international drug trafficking." [30]

The remainder of the letter expresses the government's intention that the Dutch drug policy should aim at fighting and reducing drug use. Further, it states that the government seeks to prevent and reduce the harm that is connected with the use and production of drugs, and that an expert committee will be installed to look at the present system of lists in the Narcotics Law. Also, the responsible ministers will form a so called Ministerial Team that will guard the progress of the drug policy. As far as coffee shops are concerned, the government states that its policy will focus on small-scale coffee shops that focus on the local customer, and local communities are invited to set up pilots in order to realise this. In order to fight organized crime (also in relation to the coffee shops), the government wants to ensure that there is a balance between Administrative Law and Criminal Law, and that both are used effectively.

Though there definitely is a movement towards a more restrictive approach, the Dutch drug policy still navigates between formal prohibition and the demands of practical realism. The basic principles of the condoning policy are still in place. In the Netherlands drugs discussion, there is an inclination towards rationalization while minimizing the moral considerations, by both those who favour the drug policy tenets and by those who are opposed.

The condoning policy, aptly summarised by the paradoxical 'to permit formally what is formally forbidden', has overstretched its limits. The miscalculation in the seventies, namely the lack of recognition concerning the profitability of cannabis sales, has caused a problematic situation that is far from solved. One might bluntly state that the basic assumptions and arguments for tolerance policy are outdated or erroneous. Focussing on cannabis, it is clear that the condoning policy has given international organized crime a firm foothold in Dutch society. For a long time, punishment for trade in cannabis was relatively minimal, in severity and in numbers, and prosecution (tracing) was not a priority. As some have stated, condoning was set up as a stopgap so that the Dutch people could live with inconsistencies between national and international views. The coffee shop, in its present form, has had its day. "Closing the coffee shops would make an end to artificial rationality and incredibility", according to dr. Henk van de Bunt, professor of criminology at the Erasmus University of Rotterdam. [31] Still, the coffee shops will remain a 'head ache dossier' for some time to come. [32] The separation of the markets as the desired outcome, which is the main pillar for the condoning of coffee shops, is difficult to prove. As the writers of the 'Evaluation of the Dutch drug policy' conclude circumspectly: "A positive effect of the coffee shop system on the use of hard drugs cannot be demonstrated convincingly; nor can it be ruled out."

Home cultivation of cannabis, far from being the idealistic enterprise, now is strongly in the embrace of criminals. The production of and trade in cannabis (and other drugs) is not yet under control, though there is progress on this front. Fortunately, there is a reverse trend among pupils using cannabis, but the percentage remains high in comparison to other European countries. There is a high level of cannabis use by vulnerable groups and there is an increase in requests for help by cannabis users.

It is obvious that those in the Netherlands are aware that its condoning policy regarding drugs is in need of some robust rethinking and reordering. The recent acceptance of the recommendations of the *Garretsen Committee* [33] only strengthen this view. A Dutch drug policy that is more in line with that of the other European countries is imminent.

#### Author information

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#### Conflict of interest

I declare that I have no proprietary, financial, professional or other personal interest of any nature or kind in any product, service and/or company that could be construed as influencing the position presented in, or the review of, the manuscript entitled *Going Dutch: Recent drug policy developments in the Netherlands* except for the following: employment at De Hoop Foundation, the Netherlands.

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- [12] So, "This statutory change was a direct consequence of the reasoning that the risk posed by a substance to the user and to society should form the main premise for policy making" (Margriet van Laar, Marianne van Ooyen-Houben (2009), *Evaluatie van het Nederlandse drugsbeleid*, p. 25).
- [13] See note 3.
- [14] Margriet van Laar, Marianne van Ooyen-Houben (2009), *Evaluatie van het Nederlandse drugsbeleid*, p. 26
- [15] The underlying assumption of this was the idea in the 1970's and 1980's that an important part of the drug problems is caused by the illegal status of drugs. Fighting the primary problems would cause secondary problems, for instance the criminalisation of the drug user. Aim of the policy then should be, according to its proponents, the reduction of problems that are caused by a repressive policy. This could be achieved by normalizing and culturally integrating the drugs. This would de-stigmatize users and could make other approaches possible.
- [16] This intended separation is based on the idea that the risks attached to cannabis are rated much lower than those related to hard drugs.
- [17] Originally, cannabis was sold to consumers mainly through house dealers, but from the late 1980s it was chiefly sold in coffee shops.
- [18] See R. Bieleman, R. Nijkamp (2010), *Coffeeshops in Nederland 2009, aantallen coffeeshops en gemeentelijk beleid 1999-2009 (Coffee shops in the Netherlands 2009, number of coffee shops and municipal policy 1999-2009)*, Intraval, Rotterdam/Groningen
- [19] See note 3.
- [20] These guidelines are referred to by their (Dutch) acronym as the 'AHOJ-G' criteria. Other items in this bill were: the experimental with the small-scale medical supply of heroin to so-called degenerated, psychiatric addicts, considered to be 'therapy-resistant'. More harm reduction projects should be set up instead of projects that aim at total abstinence.
- [21] When less than five plants are cultivated, the plants will be confiscated but there will not be a charge, provided, however, that these plants will not be under a lamp and that they will be watered with a water jug... Artificial light, irrigation systems, time switches or extractor hoods are seen as pointing to business cultivation.
- [22] The penalty for selling to minors and other vulnerable groups was raised. Local municipalities should keep coffee shops away from nearby schools and psychiatric hospitals.
- [23] Selling of cannabis in cafés was from that moment prohibited by law.
- [24] The figures in this paragraph are based on the *Annual Report 2009 National Drug Monitor* (Trimbos Institute 2010), accessible via <http://www.trimbos.nl/~media/Files/Gratis%20downloads/AF0981%20Engelse%20NDM%20compleet.ashx>
- [25] One has to keep in mind here that pupils in special educational schools show much higher percentages in cannabis use in comparison with pupils from the regular educational system.

[26] Only among Spanish pupils in the age of 15-16 years is current use of cannabis higher (20%). Then we find the Netherlands and France (both 15%), Italy (13%), Belgium (12%) en the United Kingdom (11%). In other countries the percentage of current cannabis users varies between one and ten percent.

[27] According to the writers of the Drug Monitor 2009, this trend might point towards an increase in the number of problematic users of cannabis, but might equally indicate the improvement of the professional care regarding cannabis problems, or an increase in the awareness of the addictive properties of cannabis, because of which users seek help at an earlier stage.

[28] Connected with the cannabis use it is important to remark that the average THC content of so called 'Netherweed' between 2004 and 2007 went down from twenty to sixteen percent and has been stable since.

[29] See note 6.

[30] TK 2008–2009, II, 24 077, nr. 237, *Brief ministers naar aanleiding van onder meer de evaluatie door het Trimbos Instituut en het WODC van het drugsbeleid – Drugbeleid, 11 september 2009* (Letter outlining drugs policy September 11 2009, English translation accessible via <http://english.minvws.nl/en/kamerstukken/vgp/2009/letter-outlining-drugs-policy.asp>).

[31] H.G. van de Bunt (2006), 'Hoe stevig zijn de fundamenten van het cannabisbeleid' ('How strong are the fundamentals of the cannabis policy'), in: *Coffeeshops en cannabis*, Justitiële Verkenningen, vol. 1, pp. 10-23

[32] One has to realize that research shows that though coffee shops are the major direct or indirect source for purchasing cannabis, they are not the only source, even in municipalities where coffee shops are located. Underage youngsters can easily procure cannabis, particularly through friends; and some also manage to buy the substance in coffee shops (WODC/Trimbos 2010).

[33] See note 8.

[Analysis of the 2011 Lancet study on deaths from overdose in the vicinity of Vancouver's Insite Supervised Injection Facility](#)

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### Abstract

In an article published in *The Lancet* on April 18 2011, it was claimed that Vancouver's Insite Supervised Injection Facility, which commenced operations on 21 September 2003, was associated with a 35% decrease in overdose deaths in its immediate surrounding area compared with the rest of Vancouver which had decreases of 9%. However, the article contains serious errors which make that claim unsustainable.

The *Lancet* article's claim that all overdose deaths in Vancouver declined between 2001 and 2005 is strongly influenced by the inclusion of the year 2001, a year of markedly higher heroin availability and overdose fatalities than all subsequent years. A study period starting from 2002 in fact shows an increasing trend of overdose deaths. The higher availability of heroin in 2001 was the subject of two previous journal articles by three of the *Lancet* article's researchers, but was not acknowledged in this current study.

The *Lancet* article's researchers also failed to mention that 50-66 extra police were specifically assigned to the 12 city blocks surrounding Insite since April 2003 which are a significant part of the target area in which the questionable 35% reduction was said to occur. A change in policing such as this could account for any possible shift in overdose deaths from the vicinity of Insite. Remarkably, three of the *Lancet* article's researchers had previously published a detailed analysis of the effects of the changed policing, where they described drug users as 'displaced' from the area around Insite.

The facility is statistically capable of saving just one life per year from fatal overdose, a reduction which would not be detectable at the population level. This estimate is backed by the European Monitoring Centre's methodology and avoids the error of naively assuming overdose rates in the facility match overdose rates in the community.

In their unsubstantiated claim of decreased overdose deaths as a result of Insite's presence, the researchers further failed to mention that 41% of British Columbia's overdose fatalities are not even injection-related, and therefore not relevant to any putative impact Insite may have.

This analysis, which has been completed for two drug prevention organisations, the Drug Prevention Network of Canada and Real Women of Canada, examines the methodology, data, interpretation and conclusions of the *Lancet* article of April 18 2010 by the research team *Brandon D L Marshall, M-J Milloy, Evan Wood, Julio S G Montaner and Thomas Kerr* titled "Reduction in overdose mortality after the opening

of North America's first medically supervised safer injecting facility: a retrospective population-based study". The study can be found at <http://www.communityinsite.ca/injfacility.pdf>. The study's abstract reads:

**Methods**

We examined population-based overdose mortality rates for the period before (Jan 1, 2001, to Sept 20, 2003) and after (Sept 21, 2003, to Dec 31, 2005) the opening of the Vancouver SIF. The location of death was determined from provincial coroner records. We compared overdose fatality rates within an a priori specified 500 m radius of the SIF and for the rest of the city.

**Findings**

Of 290 decedents, 229 (79.0%) were male, and the median age at death was 40 years (IQR 32-48 years). A third (89, 30.7%) of deaths occurred in city blocks within 500 m of the SIF. The fatal overdose rate in this area decreased by 35.0% after the opening of the SIF, from 253.8 to 165.1 deaths per 100 000 person-years (p=0.048). By contrast, during the same period, the fatal overdose rate in the rest of the city decreased by only 9.3%, from 7.6 to 6.9 deaths per 100 000 person-years (p=0.490). There was a significant interaction of rate differences across strata (p=0.049).

The numerous errors in the above article, outlined in our analysis, invalidate its findings. Where possible, the URL of any referenced abstract, statistics, or work is included to enable readers to verify all relevant information for themselves.

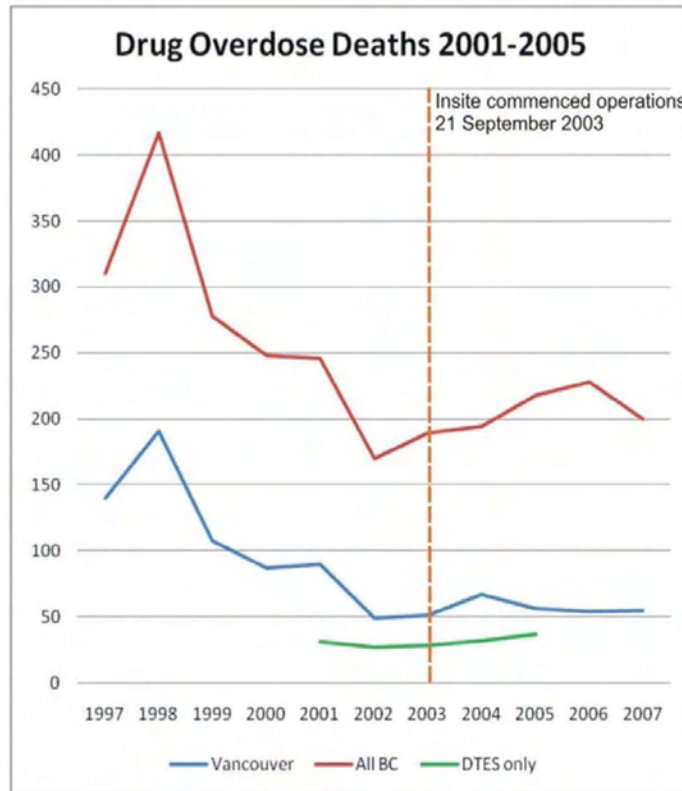
**UPWARD TREND IN DEATHS SINCE 2002**

The *Lancet* article under analysis here cites 9.3% decreases in overdose fatalities for all of Vancouver after Insite's commencement, versus 35% decreases in overdose fatalities in the Downtown Eastside (DTES) areas within a 500 metre radius of Insite.

The claims of this article are very curious from the outset, simply because a review of the statistics by the British Columbia Coroner's Service, found at <http://www.pssg.gov.bc.ca/coroners/publications/docs/stats-illicitdrugdeaths-1997-2007.pdf> clearly indicates the contrary - since Insite commenced operations on 21 September 2003, illicit drug deaths have very clearly and unmistakably increased, not decreased.

These Coroner's statistics for Vancouver and the entirety of British Columbia can also be compared with the drug death statistics for the DTES, which are found in the Vital Statistics reports (Table 45 in each) published by the British Columbia Ministry of Health for the relevant years at <http://www.vs.gov.bc.ca/stats/annual/>. (We will return to their interpretation later). The official, published statistics from 1997 to 2007 are:

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Vancouver</b>	140	191	108	87	90	49	51	67	56	54	55
<b>All BC</b>	310	417	278	248	246	170	189	194	218	228	200
<b>DTES only</b>					31	27	28	32	37		



As can be seen from the above graph the trajectory of overdose deaths in Vancouver (which are the subject of the *Lancet* article's claimed decreases) is consistent with that of illicit drug overdoses for all of British Columbia. Drug overdose fatalities peaked in 1998 with the availability of plentiful, cheaper heroin. They sharply decreased through to the year 2002, the year before Insite opened, and then exhibited gradual increases thereafter.

It must be noted that the Coroner's data includes drug overdoses judged to be intentional suicide, homicide, or some other undetermined rationale. These make up 8.4% of the BC total. The BC Vital Statistics likewise include suicides, homicides, and undetermined rationale, but additionally include accidental deaths from the legal use of prescribed drugs.

For the years 2001-2005, the *Lancet* article's researchers elsewhere record 150 drug overdose deaths for the DTES<sup>1</sup>, once suicides and unexplained deaths are excluded. However, they do not give a breakdown of the number of deaths for the five years totalling to their nominated 150 DTES deaths. Because they have not made this level of detail available, it may appear that no judgment can be made regarding increases or decreases in overdose deaths for the DTES. However, the Vital Statistics drug-related deaths for 2001-2005 total 155, indicating that there were only 5 suicides or unexplained deaths over the five year period, or on average, just one per year. This indicates that the two datasets are sufficiently close to make the judgment that DTES overdose deaths, exclusive of suicides or unexplained deaths, were trending higher from 2002 on.

When these increases in overdose deaths are compared against population growth in both Vancouver and the DTES the increases in deaths well overwhelm any changes in population. The *Lancet* study, at Table 2,[1][1] calculates a 3% change in Vancouver's population between 2001 and 2005, yet drug deaths increased by a much greater 14%. The *Lancet* study calculated an 8% increase in population for the DTES, yet drug deaths increased by 37%. In the scenario where all 5 suicides or unexplained deaths, as discussed

in the previous paragraph, occurred in the DTES in 2005, the increase in drug deaths would still be 18%, well beyond the 8% population increase for that area of Vancouver.

Given that there have only been increases in drug overdoses at the community level in Vancouver, despite the presence of the supervised injection facility, the question must be raised as to how the *Lancet* article has found 35% decreases for the area around Insite, and 9% decreases for the rest of Vancouver.

Looking at the above graph, the inclusion of 2001 in the 32<sup>2/3</sup> month pre-Insite comparison period, with overdose fatalities almost double that of 2002, creates the impression that there was a decrease in drug overdose deaths in relation to the comparison period of 27<sup>1/3</sup> months after Insite was opened.

It is difficult to ascertain why the *Lancet* article's authors would include the 2001 year in their calculations, when it creates a false picture of decreasing overdoses post-Insite. Excluding 2001 would instead have revealed an increasing trend in overdose death rates. One thing is abundantly obvious- three of the *Lancet* article's authors were very clear-sighted about the reasons for the higher overdose fatality figures before 2002, as is evidenced in their *Addiction* journal study of 2006 by Wood E, Stoltz JA, Li K, Montaner JS, Kerr T, titled 'Changes in Canadian heroin supply coinciding with the Australian heroin shortage'.<sup>2</sup>

Statements in their *Addiction* article make it clear that 2001 and preceding years belong to a very different drug availability milieu than the years 2002 and after. From their abstract:

#### **Results**

There was a 35% reduction in overdose deaths, from an annual average of 297 deaths during the years 1998-2000 in comparison to an average of 192 deaths during 2001-03. Similarly, use of naloxone declined 45% in the period coinciding with the Australian heroin shortage. Interestingly, the weight of Canadian heroin seized declined 64% coinciding with the Australian heroin shortage, from an average of 184 kg during 1998-2000 to 67 kg on average during 2001-03. Among 1587 VIDUS participants, the period coinciding with the Australian heroin shortage was associated independently with reduced daily injection of heroin [adjusted odds ratio: 0.55 (95% CI: 0.50-0.61); P < 0.001].

Further, in a 2007 article by Thomas Kerr, Nadia Fairbairn, Mark Tyndall, David Marsh, Kathy Li, Julio Montaner, Evan Wood,<sup>3</sup> the following statements clearly delineated substantial declines in overdoses amongst the Vancouver Injection Drug Users Study (VIDUS) cohort of drug users from Vancouver's DTES during 2001, along with proposed causes:

As indicated in Fig. 1, the proportion of participants reporting a nonfatal overdose has declined steadily since enrolment, with 21% of individuals reporting a non-fatal overdose in 1997 compared with just 6% in 2004. The most substantial decline occurred during 2001, with the proportion of participants reporting a non-fatal overdose declining from 12 to 5% during this year.

However, it should be noted that there was a decline over time in the proportion of participants reporting non-fatal overdose, with the most substantial decline occurring during 2001. This decline is consistent with other reports indicating a reduction in heroin-related overdoses during this period (Wood et al., 2006) and suggests that global reductions in heroin supply may have played a role in the declines in non-fatal overdose reported here.

From a study of illicit drug availability in seven Canadian cities<sup>4</sup> by other researchers,

Moreover, the longitudinal analysis suggested that heroin use had significantly decreased in all sites since 2001 (overall effect -24.9%, p < 0.001). Use of cocaine and crack cocaine was also very common across the

sites and also decreased over time (-14.1% and -11.7% respectively,  $p < 0.001$ ). Parallel to the above changes, key risk behaviours (e.g., drug injection, needle sharing and overdosing) decreased.

It is evident from the above studies that there were significant, visible changes in heroin availability during 2001, a transition year between the high heroin availability of previous years, and the clearly lower levels of availability from 2002 onwards. While the declines were still continuing throughout 2001, the year still exhibited significantly higher overdose fatalities, naloxone administrations, and heroin seizures than any of the years from 2002 onward.

The Wood et al. study re Canadian/Australian heroin shortage comparisons, despite its shortcomings, (its thesis re drug interdiction had previously been invalidated by the 2005 *Addiction* article by Degenhardt<sup>5</sup> which reported Australian Federal Police working with police in Thailand to stop heroin supply *at its source*), nevertheless details changes in heroin availability which were again significant enough to prompt the study's faulty hypothesis.

Yet the *Lancet* article's researchers declared that:

Our findings are consistent with the time-series analyses of drug-related deaths occurring after the opening of SIFs in Germany and Australia. However, the German study did not assess the relation between proximity to a facility and overdose mortality within the surrounding environs. Furthermore, an abrupt reduction in heroin supply that occurred during the same period as the Australian facility's opening limited the conclusions that could be drawn from this assessment. *By contrast, we have no evidence that significant changes in drug supply or purity occurred during the study period (our emphasis).*<sup>6</sup>

The inclusion of 2001 in the pre-Insite comparison years, with its Vancouver overdose deaths almost double those of 2002, has the effect of manufacturing the illusion of decreasing overdose deaths when in fact they were increasing. We find it very difficult to imagine that this could have escaped the attention of the *Lancet* article researchers.

## POLICING CHANGES A SUFFICIENT CAUSE

This analysis has already established that overdose fatalities were increasing in the years after Insite commenced operations. We will later demonstrate that, regardless, no positive impact by Insite on overdose deaths could have been detected at the population level.

However, despite the errors of the *Lancet* article discussed thus far, there is every likelihood that overdose fatalities since 2003 that occurred close to Insite could have decreased relative to the previously graphed increases for the rest of the DTES and, for the rest of Vancouver. The reason for some confidence in this assertion is that major changes were instituted in policing and police officer numbers within the immediate area around Insite 6 months before Insite officially commenced operations. These changes continue to this day.

Yet, curiously, the *Lancet* article's researchers disclaim any awareness of these well-documented and, in the words of drug users from the area, cataclysmic changes. In listing the possible confounders that might make their thesis of Insite's impact on DTES overdose deaths invalid, they state that:

Migration of IDUs (intravenous drug users) out of the study area could also theoretically explain the decrease in overdose mortality rates. However, a previous analysis of Vancouver IDUs showed that migration rates were stable and low throughout the study period, and that active injectors and those at greater risk of overdose tend to remain entrenched in the Downtown Eastside neighbourhood. *Additionally, we know of no changes in policing policy that could have confounded our results (our emphasis).*

The changes in policing, which the *Lancet* researchers failed to identify or acknowledge, were so significant that they prompted a 2003 Human Rights Watch complaint to the United Nations<sup>7</sup> as well as to national, provincial and local governments.<sup>8</sup> Far more significantly, for the sake of this analysis, it also prompted a 6 page journal article in the Canadian Medical Association Journal in May 2004 titled, 'Displacement of Canada's largest public illicit drug market in response to a police crackdown.'<sup>9</sup> The article, which was highly critical of the police action, was researched by a team of nine, three of whom are part of the team that researched the 2010 *Lancet* article, which so carefully disclaimed any knowledge of changes to policing in the DTES - *Evan Wood, Patricia M. Spittal, Will Small, Thomas Kerr, Kathy Li, Robert S. Hogg, Mark W. Tyndall, Julio S.G. Montaner, Martin Schechter.*

It is important to recognise that this crackdown, for the first 6 months, targeted the four city blocks in the DTES surrounding the epicentre of the open drug market in that area – an intersection of Vancouver streets metres from where Insite now stands.<sup>10</sup> Reproduced below are observations from the May 2004 study on drug user displacement:

Although there has been wide speculation on other impacts of the increased police activity, including anecdotal reports of increased enrolment in methadone programs on the one hand and charges of widespread violation of human rights on the other, the crackdown's effects had not been rigorously evaluated. (p 1551)

The stated goals of the "crackdown" involved "disrupting the open drug market and interrupting the cycle of crime and drug use that marks the streets of the Downtown Eastside. (p 1551)

Since public injection drug use and dealing have historically been concentrated on the corner of the DTES's Main and Hastings streets, we defined the area within a 1-block radius of the corner of Main and Hastings as "the core" and peripheral areas in the DTES as "outside the core." (p 1551)

As Table 2 shows, we found significant increases in reporting that police presence had affected where drugs were used and had led to outdoor (but not indoor) drug use. The latter finding was supported by a significant increase in reporting of a change in the neighbourhood or alley of use because of police presence . . . (p 1553)

As Fig. 1 shows, the total number of used syringes found on the *streets in the core* (panel a) decreased significantly after the crackdown, from a monthly average of 1082 in the 3 months before Apr. 1 to 585 in the 3 months after Apr. 1 (*t* test:  $p = 0.003$ ). However, a significant increase in unsafe disposal of used syringes was observed *outside* the core (panel b), the monthly average total number rising from 784 to 1253 in the same periods (*t* test:  $p = 0.002$ ). We also found that use of the 6 public boxes for the safe disposal of used syringes (panel c) - 4 in the core and 2 outside the core - decreased significantly, from a monthly average total number of 865 in the 3 months before Apr. 1 to 502 in the 3 months after Apr. 1 (*t* test:  $p = 0.018$ ) (*our emphases*). (p 1552)

Although evidence suggested that police presence made it more difficult to obtain drugs, this appeared to be explained by displacement of drug dealers. Other studies have similarly shown that concentrated police presence tends to displace drug-use activities and associated crime to neighbouring areas. Our results probably explain reports of increased injection drug use, drug-related crime and other public-order concerns in neighbourhoods where activities related to illicit drug use and the sex trade emerged or intensified in the wake of the crackdown. (p 1554)

Our results support anecdotal reports of increased public drug use and displacement of drug users, . . . (p 1555)

It is clear from the above statements that the policing, which commenced on 7 April 2003, removed drug dealers and public drug use from the four block area around where Insite stands today. This removal of the open drug market was associated with less discarded needles on the street, less public injections, and less overdose mortality in the area. When Insite commenced operations in September 2003, policing was expanded from 50 police<sup>11</sup> to 66 police, now covering a 12 block area. Below are statements from Vancouver police:

Yes, four officers per day, 22 hours per day, 7 days per week, for one year from Sept 03 - Sep 04 in the block at all times with cell phone access directly to them by SIS staff. These officers were paid on overtime callout at double time for that whole year. The Vancouver agreement paid for that. At the same time 60 other officers were deployed in a 5-block area and still are to this day. The police took care of public disorder. The SIS enhanced public disorder.<sup>12</sup>

Beat deployment changed a little over the years: 2003 - 4 squads x 16 men = 64; 2004 - 4 x 12 = 48 men; 2009 - 6 x 11 = 66 men. 66 police officers (6 squads of 11) plus 6 sergeants - 72. Keep in mind most squads have one spot empty so we are not really at capacity. BET teams police the area between Gore on the East, Powell, Pender and Abbott Streets.<sup>13</sup>

Below is a map of the area of <500 metre radius around Insite studied by the *Lancet* authors, taken from their own Powerpoint presentation on the *Lancet* article's data.<sup>14</sup> Their map indicates, with bright red dots, the location of overdose deaths within the 500 metre radius area around Insite, and with a white semi-transparent overlay, the location of those outside the target area. Insite is marked by the yellow dot. We have provided a semi-transparent yellow overlay above the 12 block area nominated by police as the BET beat.



26 of the total 89 overdose deaths between 2001 and 2005, located by the *Lancet* article researchers, appear outside of the BET patrol area, giving perhaps a reliable range of 59-63 deaths within the area heavily policed. Unfortunately, the *Lancet* article researchers failed to differentiate which of the overdose locations pre-existed Insite's commencement, which prevents definitive comparisons of the effect of policing on overdose fatalities. Nevertheless, the displacement of drug dealers and public drug use away from this area to the surrounding fringes, noted by three of the *Lancet* article researchers in the May 2004 study, does indeed suggest decreased overdose fatalities around Insite by virtue of the changed policing. In our analysis, we can find no reason for the *Lancet* article to assert:

*"Additionally, we know of no changes in policing policy that could have confounded our results."*

Of some importance to this issue, one of our analysis team members, Dr Colin Mangham, made these observations in questioning the conclusions of another study by Wood et al. in 2007,

Wood E, Tyndall MW, Lai C, Montaner JG, & Kerr T. Impact of a medically supervised safer injecting facility on drug dealing and other drug-related crime. *Substance Abuse Treatment, Prevention, and Policy*. 2006; 1:13.

As with the previous report, this article makes only a "no harm" claim. It fails to acknowledge or discuss the impact of police activity. In fact, there was a substantial police presence during the period of the study.

It is misleading for any inference to be made that INSITE had any impact on crime or on public disorder. Police presence more than accounts for any changes in either.<sup>15</sup>

## INSITE AVERTS JUST ONE DEATH PER YEAR

In 2008, the Canadian Government's (Parliament 40) Expert Advisory Committee (EAC), convened to evaluate Insite, and also completed an international review of injecting rooms worldwide. This was only the second extensive international review of injecting facilities, after the 2004 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) review by Dagmar Hedrich.<sup>16</sup> The EAC calculated that Insite, with around 144,000 opiate injections annually at that time, saved just 1.08 lives per year.<sup>17</sup> We note that such a small impact on averted deaths could therefore not be detected in population surveys of overdose fatalities.

This estimate accords well with the highly defensible method used in the 2004 EMCDDA review, which calculated the number of lives saved by German consumption rooms annually. Hedrich estimated the number of lives saved for the 500,000 opiate injections across all 25 injecting rooms in Germany, calculated that they cumulatively saved 10 lives per year.<sup>18</sup>

### a. EMCDDA method

The European Monitoring Centre (EMCDDA) 2004 Review of Drug Consumption Rooms <http://www.emcdda.europa.eu/html.cfm/index54125EN.html>, which is highly supportive of injecting rooms, uses the following method on page 54 to calculate lives saved for all 25 consumption rooms across Germany. It calculates from:

1. known annual overdose mortality rates per 100 dependent heroin users (estimated to be 2%)

2. the number of injections for 100 dependent heroin users per year (1,000 injections per user per year)

Thus, 100 dependent heroin users, cumulatively injecting 100,000 times a year between them, will be expected from the review's designated mortality rate, to have 2 overdose fatalities annually. 500,000 injections yield 10 expected fatalities averted by the 25 injecting rooms across Germany.

Drug Free Australia has noted that the EMCDDA Review's estimated 2% overdose fatality rate seems excessive in light of the EMCDDA's own mortality studies for 5 European countries,<sup>19</sup> (where Germany was not included, but where Spain, with the highest heroin overdose mortality, was still well below 2%). The percentages by country were:

Barcelona - Spain	1.4%	
Rome - Italy	0.2%	
Sweden	0.7%	
Amsterdam - Netherlands	unknown	
Vienna - Austria	0.2%	0.2%

The Canadian Expert Advisory Committee 2008 review [http://www.hc-sc.gc.ca/ahc-asc/pubs/\\_sites-lieux/insite/index-eng.php#insite](http://www.hc-sc.gc.ca/ahc-asc/pubs/_sites-lieux/insite/index-eng.php#insite) did not declare the method by which it concluded that 1.08 lives are saved by Vancouver's Insite per year; however the estimate is identical to that found in Andresen and Boyd's cost-benefit study on Insite in 2009, where the method is well described.<sup>20</sup> Alternatively, the EMCDDA method, used with Canadian data and assumptions, yields the same result. Canadian heroin mortality in 2002/3 was roughly the same as Australia's, at 1% (958 deaths from more than 80,000 dependent heroin users)<sup>21</sup>, and the expectation might be that the mortality percentages for 2006 or 2007 would show little change. Further, the Expert Advisory Committee clearly stated their assumption that a typical Canadian heroin user injects 4 times daily,<sup>22</sup> a higher average than the 2-3 times daily assumed by the EMCDDA review.

Thus, 100 Canadian heroin users will cumulatively inject 146,000 times annually, and the 2007 data of 144,000 opiate injections in the facility (opiates and cocaine are often injected together) might be expected to avert the death of one injection in 146,000 that likely would have been fatal. (It should be noted that cocaine solely by itself has historically accounted for a very small proportion of deaths in British Columbia.)<sup>23</sup>

#### **b. Invalid calculations from overdoses in the facility**

In Drug Free Australia's 2007 and 2010 analyses of the Sydney Medically Supervised Injecting Centre, non-fatal overdose rates reported by heroin users during the years of plentiful heroin supply in Australia were 2.3 overdoses per 10,000 injections. This is compared to rates of overdose inside the Sydney injecting centre of 72 overdoses per 10,000 opiate injections over its nine years of operation. This disparity is even more remarkable when it is considered that only 44% of Sydney injecting centre clients had previously overdosed.

Rates of overdose in the Sydney injecting centre were 32 times higher than clients' documented previous rates of overdose. On the testimony of ex-clients of the centre,<sup>24</sup> this was due to a culture of experimentation with cocktails of illicit and prescription drugs, mostly involving heroin. The government-funded evaluation in 2003 also speculated that experimentation with higher doses of heroin, in the assured safety of the centre, may explain the inordinately high overdose rates. Evaluations commissioned by the NSW Government, to

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estimate the number of deaths averted by the Sydney injecting centre, uniformly failed to compare client's overdose histories with overdose rates in the injecting centre. This allowed a naïve calculation of the number of lives saved based on the artificially elevated number of overdoses in the centre, prompted by experimentation in safety.

Insite's rate of overdose intervention for the 1,004 (raw number of overdoses in which the staff had to intervene) that was recorded between 2004 and 2008, was 13 overdoses per 10,000 injections, according to a study by *M-J. S. Milloy, Thomas Kerr, Mark Tyndall, Julio Montaner, Evan Wood*, titled 'Estimated Drug Overdose Deaths Averted by North America's First Medically Supervised Safer Injection Facility'.<sup>25</sup> Calculations in the Milloy et al. study yielded estimates of between 2 and 12 deaths averted per year in the facility.

However, the researchers' estimates of deaths averted have no plausibility when it is considered that they recorded 28 overdose deaths for the whole of the Downtown Eastside for 2005 and 2006 each, as per Table 2 in their study, while also acknowledging that Insite hosts only 5% of all injections in the entire DTES.<sup>26</sup> Their estimate of 2-12 averted deaths per annum were calculated from the 453 of the 1,004 overdoses deemed 'potentially fatal' by the researchers (all, it would seem, attracting naloxone administration), averaging 8.9 administrations per month in Insite. This is while the rest of the DTES, with 95% of all injections in the area, averaged just 31 naloxone administrations per month in 2002/3, a year with only 30% less overdose fatalities than 2005 and 2006 (Panel B in the Canadian/Australian heroin shortage study indicates around 370 naloxone administrations in the entire DTES during 2002/3 before Insite opened).<sup>27</sup> The disproportion of so many naloxone interventions in Insite is plainly visible, and the explanation that Insite clients are at such a significantly higher risk of overdose than other dependent users in the DTES, is neither cogent nor demonstrated.

Estimates of deaths averted, calculated from the number of overdoses within Insite, have no validity, while differences between overdose rates within and outside of Insite, remain unexamined and highly disparate. Such a naïve approach to estimates, which has been apparent for both the Sydney and Vancouver facilities, should be shunned by political and bureaucratic decision makers.

#### 41% OF BC OVERDOSE DEATHS NON-INJECTION-RELATED

Not disclosing the percentage of overdose deaths in British Columbia that are non-injection related, is a further failing of the *Lancet* article's research. It is clear that only injection-related overdose fatalities in the DTES would be relevant to their study of the apparent impact of Insite as a local supervised injection facility.

Yet the *Lancet* article's own researchers elsewhere declare the percentage of BC overdose deaths which are injection-related, such as in their internet-accessible presentation, 'Burden of illicit drug overdose mortality in British Columbia and the effect of Vancouver's Supervised Injection Facility'.<sup>28</sup> In this presentation injection-related overdose fatalities compose 59.5% of British Columbia's total of 909 deaths between 2001 and 2005,<sup>29</sup> leaving 40.5% which are non-injection-related, as per the reproduction of Slide 17 below:

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**TABLE 3.** Unadjusted logistic regression analysis of factors associated with First Nations status among individuals dying of illicit drug overdoses, province of British Columbia, 2001 – 2005 (n = 909 decedents)

Characteristic	Total 909 (100.0) n (%)	Aboriginal 104 (11.4) n (%)	Odds Ratio	95% Confidence Interval
<b>Injection-related</b>				
No	368 (40.5)	30 (28.8)	1.00	
Yes	541 (59.5)	74 (71.2)	1.79	1.13 – 2.79
<b>Opioids detected</b>				
No	466 (51.3)	54 (51.9)	1.00	
Yes	443 (48.7)	50 (48.1)	0.97	0.64 – 1.46
<b>Cocaine detected</b>				
No	374 (41.1)	42 (40.3)	1.00	
Yes	535 (58.9)	62 (59.6)	1.04	0.68 – 1.57
<b>ATS detected</b>				
No	880 (96.8)	103 (99.0)	1.00	
Yes	29 (3.2)	1 (1.0)	0.27	0.04 – 2.00
<b>Alcohol detected</b>				
No	840 (92.4)	94 (90.4)	1.00	
Yes	69 (7.6)	10 (9.6)	1.35	0.67 – 2.72
<b>Polydrugs detected</b>				
No	598 (65.8)	66 (63.5)	1.00	
Yes	311 (34.2)	38 (36.5)	1.12	0.73 – 1.72

While it is probable that the DTES might have a higher percentage of injection-related overdose deaths than the rest of BC, it is also clear that, with such a high percentage of BC deaths not related to injection, the DTES will still have a considerable number of deaths that are non-injection-related.

The failure of the researchers to declare that a percentage of deaths are non-injection related, or to assign this percentage to the DTES, is inexplicable. Also, they calculate all deaths in the DTES as being injection-related when they clearly appear from the BC Coroner data to be otherwise.

Whatever the percentage of overdose fatalities were between 2001 and 2005 in the DTES, the inclusion of any non-injection-related overdose deaths in a study on a Supervised Injecting Facility's impact on the community, is both invalid and indefensible, falsely inflating the supposed deaths averted.

### SHORTCOMINGS OF THE PEER-REVIEWED STUDIES

In this analysis we have demonstrated that the 2010 *Lancet* article on reduced overdoses in the immediate vicinity of Insite had considerable, demonstrable errors. These errors were in its assertions of:

1. decreased overdoses for Vancouver when the Coroner's data indicates incontrovertible increases, achieved by an indefensible, inflated baseline that included 2001, a year of demonstrably higher overdose deaths in Vancouver;
2. no detectable policing confounders which might alter their findings, when in fact there were extensive changes to policing in the midst of their study's focus years; and
3. the inclusion of an unspecified number of non-injection-related overdose deaths in the study, as relevant to the impact of Insite on the DTES levels of overdose deaths.

Once these errors are accounted for, the claims for Insite's effectiveness in reducing overdose fatalities in the Vancouver area to more than one life saved per year (estimate of Canadian Government's Expert Advisory Committee), are shown to be entirely without foundation.

At the political level, the *Lancet* study was highly influential, errors notwithstanding. Further, it is not the only influential Insite study with demonstrable errors. Previously we referred to an Insite study on reduced crime in the DTES, a finding credited to Insite rather than the additional 50-72 police engaged in the DTES area around Insite. Added to this are the spurious claims by Insite researchers that the facility impacted HIV and

HCV transmission, despite this being possible only if ALL of the injections by those who were HIV or HCV positive, were hosted by Insite, which was rarely the case.<sup>30</sup>

Further, these spurious conclusions have been the basis for vastly inflated financial estimates of Insite's supposed cost-savings in terms of comparable costs of drug harm averted for the Canadian tax-payer – all highly influential on politicians but not at all based in factual science. The 2009 Andresen and Boyd cost-benefit study calculated savings to government from 35 supposed HIV/AIDS transmissions averted by Insite annually,<sup>31</sup> despite the most authoritative international review to date not finding any demonstrated effectiveness of clean needle provision reducing HIV transmission via needle exchanges.<sup>32</sup>

These studies have all been peer-reviewed, and yet can be very quickly falsified when exposed to critical scrutiny in perhaps a more adversarial setting than that of peer-review. This may indicate some real limitations in the peer-review processes of medical journals, since these peer-reviewers may not have the same access to localised observations and data that would falsify the hypothesis they are scrutinising.

In the field of illicit drug policy, we would recommend that politicians and the judiciary would do best to advertise for critical comment on peer-review studies before making pertinent decisions, perhaps allowing a month for input. Drug prevention organisations worldwide have ready access to a significant number of addiction experts and academics who are able to provide excellent critique.

<sup>1</sup> Milloy M-J, Marshal B, Wood E, Montaner J, Kerr T. *Burden of illicit drug overdose mortality in British Columbia and the effect of Vancouver's Supervised Injection Facility*. See Slide 8

<http://www.bccdc.ca/NR/rdonlyres/850336FA-06F1-4D19-88D6-5223DABF54D2/0/May6BurdenofIllicitDrugOverdoseMortalityinBC.pdf>

- we note that all deaths within Vancouver add up to 290 on this slide, which accords exactly with the 290 nominated in the *Lancet* article

<sup>1 [1]</sup> Milloy M-J, Marshal B, Wood E, Montaner J, Kerr T. *Burden of illicit drug overdose mortality in British Columbia and the effect of Vancouver's Supervised Injection Facility*. See Slide 8

<http://www.bccdc.ca/NR/rdonlyres/850336FA-06F1-4D19-88D6-5223DABF54D2/0/May6BurdenofIllicitDrugOverdoseMortalityinBC.pdf>

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<sup>2</sup> Wood E, Stoltz JA, Li K, Montaner JS, Kerr T. *Changes in Canadian heroin supply coinciding with the Australian heroin shortage*. *Addiction* 101 (2004) p 689-695 <http://www.ncbi.nlm.nih.gov/pubmed/16669902>

<sup>3</sup> Kerr T, Fairbairn N, Tyndall M, Marsh D, Li K, Montaner J, Wood E. *Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users*. *Drug and Alcohol Dependence* 87 (2007) pp 39-45 <http://www.ncbi.nlm.nih.gov/pubmed/16959438>

<sup>4</sup> Fischer B, Rehm J, Patra J, Firestone Cruz M. *Changes in illicit opioid use across Canada*. *CMAJ* 175 no.11 (2006) pp 1385-87 <http://www.cmaj.ca/content/175/11/1385.full.pdf+html>

<sup>5</sup> Degenhardt L, Reuter P, Collins L, Hall W. *Evaluating Explanations of the Australian "heroin shortage"* *Addiction* 100, (2005) pp 459-469

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.88.9001&rep=rep1&type=pdf>

<sup>6</sup> Marshall BDL, Milloy M-J, Wood E, Montaner JSG, Kerr. *Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study*. *The Lancet* published online, April 18, 2011 web copy p 7 <http://www.communityinsite.ca/injfacility.pdf>

<sup>7</sup> <http://www.unhcr.org/refworld/country,,HRW,,CAN,,3f4f594fd,0.html>

<sup>8</sup> <http://www.hrw.org/node/12330/section/> for a full description of Human Rights Watch observations and actions, particularly section 7

<sup>9</sup> Wood E, Spittal PM, Small W, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JSG, Schechter M. *Displacement of Canada's largest public illicit drug market in response to a police crackdown*. *CMAJ* May 11, 2004; 170 (10) pp 1551-6 <http://www.cmaj.ca/content/170/10/1551.full>

- <sup>10</sup> Wood E, Spittal PM, Small W, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JSG, Schechter M. *Displacement of Canada's largest public illicit drug market in response to a police crackdown*. CMAJ May 11, 2004; 170 (10) p 1552 <http://www.cmaj.ca/content/170/10/1551.full>
- <sup>11</sup> Wood E, Spittal PM, Small W, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JSG, Schechter M. *Displacement of Canada's largest public illicit drug market in response to a police crackdown*. CMAJ May 11, 2004; 170 (10) p 1551 <http://www.cmaj.ca/content/170/10/1551.full>
- <sup>12</sup> Mangham C2. *A Critique of Canada's INSITE Injection Site and its Parent Philosophy: Implications and Recommendations for Policy Planning*. Journal of Global Drug Policy and Practice Vol 1, Issue 2 - Summer 2007 <http://www.globaldrugpolicy.org/1/2/2.php>
- <sup>13</sup> Correspondence by Vancouver police with Drug Prevention Network of Canada
- <sup>14</sup> Milloy M-J, Marshal B, Wood E, Montaner J, Kerr T. *Burden of illicit drug overdose mortality in British Columbia and the effect of Vancouver's Supervised Injection Facility*. See Slide 32 <http://www.bccdc.ca/NR/rdonlyres/850336FA-06F1-4D19-88D6-5223DABF54D2/0/May6BurdenofIllicitDrugOverdoseMortalityinBC.pdf>
- <sup>15</sup> Mangham C. *A Critique of Canada's INSITE Injection Site and its Parent Philosophy: Implications and Recommendations for Policy Planning*. Journal of Global Drug Policy and Practice Vol 1, Issue 2 - Summer 2007 <http://www.globaldrugpolicy.org/1/2/2.php>
- <sup>16</sup> Hedrich D. European Report on Drug Consumption Rooms. EMCDDA (2004) <http://www.emcdda.europa.eu/themes/harm-reduction/consumption-rooms>
- <sup>17</sup> See the Expert Advisory Committee's Executive Summary vii [http://www.hc-sc.gc.ca/ahc-asc/pubs/\\_sites-lieux/insite/index-eng.php#insite](http://www.hc-sc.gc.ca/ahc-asc/pubs/_sites-lieux/insite/index-eng.php#insite)
- <sup>18</sup> Hedrich D. European Report on Drug Consumption Rooms. EMCDDA (2004) p 54 <http://www.emcdda.europa.eu/themes/harm-reduction/consumption-rooms>
- <sup>19</sup> EMCDDA, Implementation, follow-up and analysis of cohort studies on mortality among drug users in European Union member States; Lisbon: EMCDDA, July, 1999 /first and second phase reports)
- <sup>20</sup> Andresen MA, Boyd N. *A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility*. International Journal of Drug Policy 2010 Jan;21(1):70-6. Epub 2009 May 6. <http://www.educatingharper.com/documents/Costbenefit.pdf>
- <sup>21</sup> Popova S, Rehm J, Fischer B. *An overview of illegal opioid use and health services utilization in Canada*. Public Health. 2006 Apr;120(4):320-8. Epub 2006 Feb 14 p1 <http://www.ncbi.nlm.nih.gov/pubmed/16476455>
- <sup>22</sup> See the Expert Advisory Committee's Background section, 4th paragraph [http://www.hc-sc.gc.ca/ahc-asc/pubs/\\_sites-lieux/insite/index-eng.php#insite](http://www.hc-sc.gc.ca/ahc-asc/pubs/_sites-lieux/insite/index-eng.php#insite)
- <sup>23</sup> See a useful summary of the BC Coroner's report from the mid-90's before mixing heroin and cocaine was as prevalent <http://www.cannabisculture.com/v2/articles/973.html>
- <sup>24</sup> Gordon Moyes speech to NSW Parliament Legislative Council Hansard 26 July 2007 <http://www.parliament.nsw.gov.au/prod/parliament/hansart.nsf/V3Key/LC20070626035>, also Andrew Fraser's speech to NSW Parliament, Legislative Assembly 21 October 2010 <http://www.parliament.nsw.gov.au/prod/parliament/hansart.nsf/V3Key/LC20070626035>
- <sup>25</sup> Milloy M-JS, Kerr T, Tyndall M, Montaner J, Wood E. *Estimated Drug Overdose Deaths Averted by North America's First Medically-Supervised Safer Injection Facility*. PLoS ONE, October 2008 Volume 3 Issue 10 <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0003351>
- <sup>26</sup> We note that Andresen MA, Boyd N. *A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility*. International Journal of Drug Policy 2010 Jan;21(1):70-6. Epub 2009 May 6. <http://www.educatingharper.com/documents/Costbenefit.pdf> records an estimate of 4,565,000 injections per year for the DTES as a whole
- <sup>27</sup> Wood E, Stoltz JA, Li K, Montaner JS, Kerr T. *Changes in Canadian heroin supply coinciding with the Australian heroin shortage*. Addiction 101 (2004) p 689-695 <http://www.ncbi.nlm.nih.gov/pubmed/16669902>
- <sup>28</sup> Milloy M-J, Marshal B, Wood E, Montaner J, Kerr T. *Burden of illicit drug overdose mortality in British Columbia and the effect of Vancouver's Supervised Injection Facility*. see Slide 17 <http://www.bccdc.ca/NR/rdonlyres/850336FA-06F1-4D19-88D6-5223DABF54D2/0/May6BurdenofIllicitDrugOverdoseMortalityinBC.pdf>
- <sup>29</sup> It should be noted that the Coroner's data for British Columbia indicates 932 accidental OD deaths excluding suicide/homicide/undetermined deaths for the period 2001-2005 (British Columbia Coroner's Service data 1997-2007, <http://www.pssg.gov.bc.ca/coroners/publications/docs/stats-illicitdrugdeaths-1997-2007.pdf>) which differs slightly to the 909 cited by Milloy et al. Nevertheless, where 40.5% of all BC

overdose deaths are non-injection-related, the difference of 23 deaths between the two datasets is not refractory to our criticism of the Lancet article's failure.

<sup>30</sup> Mangham C. *A Critique of Canada's INSITE Injection Site and its Parent Philosophy: Implications and Recommendations for Policy Planning*. Journal of Global Drug Policy and Practice Vol 1, Issue 2 - Summer 2007 <http://www.globaldrugpolicy.org/1/2/2.php>

<sup>31</sup> Andresen MA, Boyd N. *A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility*. International Journal of Drug Policy 2010 Jan;21(1):70-6. Epub 2009 May 6. <http://www.educatingharper.com/documents/Costbenefit.pdf>

<sup>32</sup> US Institute of Medicine. *Preventing HIV Infection among Injecting Drug Users in High Risk Countries: An Assessment of the Evidence*. 2006 <http://www.iom.edu/Reports/2006/Preventing-HIV-Infection-among-Injecting-Drug-Users-in-High-Risk-Countries-An-Assessment-of-the-Evidence.aspx>