JOURNAL OF DRUG ISSUES 29(3), 653-678, 1999

ECSTASY USE AND POLICY RESPONSES IN THE NETHERLANDS

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During the last 25 years, the Netherlands has attempted to achieve a balanced, two-track, public health and justice policy on drugs. This paper considers the implementation of that policy for ecstasy, a drug that has gained popularity throughout Europe during this decade. Prevention is the Dutch government's primary policy aim. Research, monitoring, and registration are important foundations for the public health aspects of Dutch policy. Important policy instruments include the development of regulations directed towards reductions in the environmental risks posed by house parties and efforts to educate users and non-users about the drug. The justice elements of Dutch ecstasy policy include the outlawing of compounds (since 1988), passing new criminal legislation, and enhancing national and international co-operative enforcement efforts. In 1996, the Public Prosecutor reviewed the criminal investigation and prosecution policy and ordained that all hard drugs (predominantly heroin, cocaine, and ecstasy) had to be criminally investigated and prosecuted along the same lines. Some public health and criminal justice elements of the national policy reinforce each other but others are conflicting. Policy efforts are directed towards the continuing process of maintaining a balance between these approaches and the control of conflicting interests.

INTRODUCTION

As has been typical of many new drugs, ecstasy first appeared in Amsterdam (in the late 1980s) after first being discovered by substance trendsetters in the United States. At that time, it had a "candlelight" image as a drug best taken at home with a few intimate friends that would make one feel peaceful and loving. It soon became an option for those who wanted to use a relatively harmless, "light," social drug. The placement of ecstasy on Schedule I (Schedule I is reserved for "hard drugs" like opiates and cocaine; only cannabis is placed on Schedule II, the "soft drugs" list) in 1988 was based on evidence of large-scale production and trading; however, it was also thought to have been largely a

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JOURNAL OF DRUG ISSUES 0022-0426/99/03/653-678 $3

political act, of symbolic importance for smoothing international governmental relations.

A rapid and steep increase in ecstasy use occurred when the substance became popular as a party or dance drug. It soon was indelibly associated with house or rave parties (the terms refer to acid house music), discotheques, and large-scale festival events, although ecstasy was also used outside the party and nightclub circuit. As had been observed in other countries (Gamella, 1997), its growing popularity in the Netherlands was at least partially determined by the popular image of what it was not. For example, it was not viewed as a drug for losers like heroin junkies, nor an addictive and ego-centering drug like cocaine, nor as an hallucinogen like LSD, nor unpleasantly "speedy" like amphetamine. Unlike these negative images, ecstasy was generally believed to be relatively harmless, a party drug that could be taken without endangering oneself or others (Nabben, 1998).

In the U.S. in the seventies, ecstasy was the popular street term for MDMA. MDMA is an amphetamine analogue of the MDA-type, a family of drugs with almost 200 members, all sharing a similar core molecular structure that can be modified to produce a large number of related drug types. In the eighties, the term ecstasy referred to substances of diverse composition (Siegel, 1986). Nowadays, products widely sold as ecstasy on the illicit drug markets may contain MDMA, some other amphetamine analogue, or combinations of analogues. This was one of the reasons given by the World Health Organization in 1997 for straying from the scientific definition of "the real thing" (ecstasy) exclusively for MDMA: "The term 'ecstasy' is now used so widely that it may be considered to be virtually generic for any member of the amphetamine analogues of the MDA type" (WHO, 1997: 6). It is usually taken in tablet form (one or more pills) but sometimes as a capsule or powder.

Among other things, this paper will describe recent developments in ecstasy use as reflected in the data collected from ongoing studies. Next, it addresses questions of what we currently know about ecstasy, its pharmacological and toxic properties, and the actual composition of compounds sold as ecstasy on the illicit drug market. The major issue in this paper is an exploration of the Dutch two-track policy response to ecstasy use, including public health concerns and health risk assessment, as well as law enforcement attempts to control its trafficking and production. The description of the public health and justice aspects of the current policy is followed by a discussion of the relationship between the disparate elements of this policy and how these are complicated by other, not specifically drug-related, policy factors.

THE USE OF ECSTASY, EPIDEMIOLOGY AND SOCIAL CONTEXT

Ecstasy has become a popular drug among both school-age youth and the adult drug using population (Abraham, in press). It ranks fourth behind alcohol, tobacco, and cannabis use among youth (Zwart et al., 1997) and fifth among the general population (preceded by cocaine) (Abraham, in press).

While Dutch national school surveys have been conducted every four years since 1984, the use of ecstasy was not measured until 1992, as the drug did not appear to be of any importance outside the confines of a trendy Amsterdam circle. As is the case for various other countries where students in the most commonly used school system are surveyed, Dutch national school surveys are limited to

those school-age youth that participate in ordinary high schools. Despite compulsory education until the age of 16, some pupils are very often truant and others are difficult to educate or have learning problems and go to special high schools. These youth are considered a vulnerable, disadvantaged group, at risk for many dangerous or deviant behaviors, drug use among them. Therefore, in 1989, a special survey, comparable to the general school survey, was developed to measure these young people's drug use. By then, ecstasy had come into the picture as a drug of growing popularity. The lifetime prevalence of these vulnerable youngsters' ecstasy use was first assessed in 1990. In 1997, both the lifetime and last-month prevalence of ecstasy use were measured in the national special high school and truancy project surveys (Stam et al., 1998).

Table 1 shows the lifetime and last month prevalence rates among 12-18 year old students in ordinary high schools, high school students in special education and high school students playing truant in the Netherlands since 1990. Between 1992 and 1996, both the lifetime and last month prevalence increased sharply among regular high school students. However, this increase was even more pronounced for students in special education programs. In addition to an increase in use for all groups, Table 1 shows that both lifetime and last month prevalence are higher for students in special high schools than for those in ordinary high schools and highest for young people of school age who are often truant. In fact, the prevalence of ecstasy use among this latter group is nearly eight times higher than it is for students in ordinary high schools.

TABLE 1

NATIONAL LIFETIME AND LAST MONTH PREVALENCE OF ECSTASY USE AMONG HIGH SCHOOL STUDENTS, 12-18 YEARS OF AGE

	Lifetime prevalence				Last month prevalence		
	1990	1992	1996	1997	1992	1996	1997
High school students in regular schools		3.3%	5.6%		1.0%	2.2%	
High school students in special schools	2.1%			9.4%			4.0%
High school-age students playing truant	3.4%			29.5%			15.0%

The use of ecstasy is considered to be predominantly of a recreational character, and most public and policy attention is paid to its use at large-scale rave or house party events, although it is also used at home (supposedly by people with a tendency to chronically use). Raves or house parties are generally held in multi-purpose halls, sports halls, stadiums, warehouses, and the like. They have a special-events character, starting sometime in the evening and closing sometime during the night, and the number of participants range from several hundred to a few thousand. Among young people frequenting large-scale rave parties, the energy required to dance through the night to special "acid house" music and the pleasant sociability brought about through ecstasy intoxication are the most important reasons given for its use. Ecstasy is also used in regular nightlife establishments and places like discos and large cafes or pubs where people go for pleasure-seeking purposes. From time to time, these venues organize smaller house parties on their premises, within licensed opening hours. Public events with a festive character, like street and other open air festivals, are also occasions for people to use ecstasy.

Various surveys indicate that the majority of ecstasy users are white male adolescents and young adults, although people in their late thirties are now also found among their ranks (Jansen and Hoebe, 1997; Wijngaart et al., 1997). Users come from diverse social backgrounds, varying from highly educated pleasure-seekers to teenage dropouts and football supporters with little formal education. These varying demographic characteristics are also found among ecstasy users in most of the European countries where the drug is popular.

TABLE 2
LIFETIME (LTP) AND LAST-YEAR (LYP) PREVALENCE OF ECSTASY USE IN THE NETHERLANDS AND IN OTHER EUROPEAN COUNTRIES

Country		Age range		LTP (population surveys)		LYP (population surveys)		LTP (school surveys)	
	Year	All adults	Younger adults	All adults	Younger adults	All adults	Younger adults	Year	15 to 16-year old students
the Netherlands	1997	12 and older		1.9		0.7		1996	8.1
Belgium (Flanders)	1995	18-65	18-39	0.5	1.1		0.5	1996	6.0
Denmark								1995	0.5
Germany (former W)	1995	18-59	18-39	1.6	2.8	0.9	1.6		
Germany (former E)	1995	18-59	18-39	0.7	1.3	0.6	1.2		
Spain	1997	15-65		2.5		1.0		1994	2.9*
Ireland								1995	9.0
Italy								1995	4.0
Luxembourg								1995	0.9
Finland								1995	0.2
Sweden	1996	15-69	15-34	0.0	1.0			1997	0.8
U. Kingdom	1996	16-59	16-29	3.0	9.0	1.0	4.0	1995	8.0

*This figure includes other synthetic drugs but not amphetamine.

Source: EMCDDA 1998; Hibell et al. 1997, Abraham (in press, Dutch population survey)

Ecstasy use among the general Dutch population was first measured in 1997, although several regional surveys had been conducted earlier. These regional surveys show an increase in ecstasy use among both the general population (Sandwijk et al., 1995) and youngsters (Korf et al., 1998) since the late 1980s. The 1997 national survey showed that nearly 2 percent of the general population (12 years and older) had used ecstasy at least once in their lifetimes (Abraham, in press). Lifetime prevalence among 15 to 16 year-old students (1996) is remarkably higher, around 8 percent (EMCDDA, 1998) (see Table 2).

Ecstasy use is increasingly reported in other European countries as well. As Table 2 indicates, cross-nationally, lifetime prevalence of ecstasy use among the general population ranges from 0.5 percent in Belgium to 3 percent in the United Kingdom. Ecstasy use in Europe as a whole, as in the Netherlands, is concentrated among students and young adults. Ireland, the United Kingdom, and the Netherlands report the highest prevalence rates for ecstasy use among 15-16 year olds (Hibell et al., 1997; EMCDDA, 1998). It should be noted that comparisons

of ecstasy use prevalence rates (as is the case with other substances) between countries are not yet without their flaws, due to differences in applied methodologies (e.g. differences in modes of interviewing, sampling techniques, and questionnaire design). National characteristics (e.g. cultural differences between the countries in taboos that may influence the reliability of responses to drug use questions and differences in the average age at which young people start to experiment with drug use) may also influence the overall rates. Different countries also have very different social and economic compositions and markedly distinct drug policies.

TREATMENT DATA

In addition to the prevalence figures for ecstasy use, other indicators of problematic use can be applied as well. Treatment data are available as additional sources of information. There have been very few serious ecstasy-related incidents reported in the Netherlands. In 1996, the First Aid (emergency) departments of hospitals treated 221 people diagnosed with probable ecstasy intoxication (without a thorough toxicological analysis, the diagnosis is not certain, and these tests are rarely done). In the vast majority of cases (89 percent), doctors reported that patients presented only mild symptoms, and many of them were discharged after a brief visit. Only one patient, an individual who had taken both ecstasy and cocaine in a suicide attempt, has died. In ongoing research, the National Intoxications and Information Center discovered that, when completing a full toxicological analysis on patients reporting ecstasy use as a precipitant of their illness, most of them, especially the very serious cases, had consumed more than one substance at the time (Spaans et al., in press).

Given the nature of hospital emergency room data, it is not possible to establish a relationship between the place where ecstasy was taken – whether at home, at a regular establishment, or at a large-scale house party – and the onset of symptoms (Spruit, 1997). Research among the first-aid posts established at 10 large-scale house parties where nearly two-thirds of the visitors used ecstasy (Wijngaart et al., 1997) revealed that they had treated few problem cases associated with reported ecstasy use. Nearly all of the injuries they treated had been related to the extensive physical exercise associated with nonstop dancing and the resultant exhaustion. A recent study by Bruin et al. (1999) found that at 42 parties studied, only 25 of the 250,000 party visitors were taken to a hospital for treatment for any reason. Qualified first-aid personnel present during these parties claimed that almost all (97 percent) of the 958 people who came to their posts for attention were not suffering from any serious complications, and nearly three-quarters of them returned to the party within half an hour. In the same study, among a sample of 1121 (regular) rave party visitors, only 10 percent ever visited the first-aid post. An additional finding of the study is that problematic health events apparently occur more often among hardcore house music lovers (12.3 percent) than they do among mellow house music lovers (2.7 percent). The public that attended the mellow house parties varied in terms of age, dress, lifestyle, and recreational behavior; whereas those who attended hardcore house parties were, to a greater extent, part of a youth subculture specifically related to this style of music. Only 7 percent of the total sample had become ill more than twice at rave parties they visited. Those consuming non-MDMA pills, regularly

using both ecstasy and amphetamine, or using large doses of these drugs are at greater risk.

Registration data from the facilities for Addiction Care and Assistance, another source of treatment data, show that in 1997, 392 clients with ecstasy-related problems were assisted (Ouwehand et al., 1998). This is 1 percent of all the people with alcohol and/or drug and/or compulsive gambling problems whom they assisted, rather few as compared to, for example, the number of clients who have problems because of the use of amphetamines. The latter included 1034 people, or 2 percent of the people assisted, although the prevalence of amphetamine use is lower than that of ecstasy (e.g. among regular high school students, the last year prevalence of amphetamine in 1996 was 1.8 percent, while that of ecstasy use was 5.6 percent) (Zwart et al., 1997).

MONITORING THE ECSTASY MARKET

In 1992, a unique project started in the Netherlands to chemically monitor the ecstasy market: the Drugs Information and Monitoring System (DIMS). The aims of the project include educating ecstasy users about the chemical content of ecstasy and its effects (as far as known) and issuing warnings when highly-dosed pills or pills with compounds like LSD, hallucinogenic amphetamine derivatives, formally defined poisons, amphetamines, etc., are encountered (DIMS, 1998). An important reason for this monitoring project is that when it began, the ecstasy market was new, with inexperienced clients. Even experienced users can benefit from these testing services, as the contents of an ecstasy tablet, unlike that of cannabis or powdered drugs, cannot be determined by how it smells, looks, or tastes. Before the DIMS project, users had to depend on their dealers to tell them what to expect of the drugs they bought or rely on friends to "experiment" with a pill before they themselves took it. Professionals were to a large extent just as unaware of the characteristics and effects of ecstasy as users and lay people.

One of DIMS' tasks is to chemically analyze drug samples that have been marketed as ecstasy. Table 3 provides examples of compounds encountered in ecstasy samples that were collected by DIMS. Their analyses revealed a broad range of amphetamine derivatives with ecstasy-like or hallucinogenic effects, although other, sometimes powerful, hallucinogenic compounds were also encountered. There were also amphetamine and methamphetamine and a wide range of other, non-amphetamine-based compounds. GHB is sometimes marketed as "liquid ecstasy," and, in pills, even compounds officially labeled as poison have been found. Experimental products vary widely, often being fabricated with legal chemicals in a search for an "ecstasy-like" effect. In 1997, laboratory analyses revealed that 39 different components were present in 20 percent of the drug samples gathered by DIMS, substances that could not be identified through standard analysis. These samples were then analyzed using more sophisticated (and expensive) techniques. Another 20 percent of the samples required that special techniques be used to ascertain their contents; 33 different chemical components were found, 14 of which were then being identified for the first time. Finally, many sampled tablets contained more than one compound, and these mixtures varied widely in terms of both their potency and effects. There were also samples with no more potential for effect than a cup of tea or coffee (DIMS, 1998).

TABLE 3
EXAMPLES OF PREPARATIONS AND COMPOUNDS APPEARING ON THE MARKET AS ECSTASY (SAMPLES ANALYZED BY DIMS)

	Examples of compounds	Quantity/ Combinations with other compounds
Ecstasy and ecstasy-like amphetamine derivatives	MDMA, MDEA, MDA, MBDB	varying
Hallucinogenic congeners and other hallucinogens	2-CB, DOB, ketamine, LSD	varying
"Speed," "Ice" (scene terms)	amphetamine, methamphetamine	varying
Medications (psycho-active, somatic active); poisons	GHB, atropine, etc.	varying/unknown
Experimental products	very diverse	unknown/varying
Hardly/not active	caffeine, etc.	unknown/varying

It is now clear that over time and place, the composition of substances sold as ecstasy have varied considerably. This is illustrated in Table 4, where the contents of tablets bought, sold, and used as ecstasy during the last two years are identified. For 1997, Table 4 shows that a substantial proportion of the street substances being marketed as ecstasy were actually comprised of amphetamine. Overall, 32 percent of all ecstasy drug samples tested in 1997 contained amphetamine ("speed") or methamphetamine ("ice"), ranging from a low of 4 percent in February and March to a high of 49 percent in August. On average, in 1997, only 34 percent of the substances sold as ecstasy actually contained MDMA. In that year, the range of street chemicals sold as ecstasy that consisted of MDMA varied from a high of 64 percent in February to a low of 20 percent in October. The category of "other psycho-active" pills peaked in May at 19 percent. Many of these tablets contained the hallucinogenic 2C-B, several in combination with MBDB, MDMA, and/or MDEA. This indicates that during that period many ecstasy users might have been confronted with unexpected hallucinations. In June, the police found a large 2C-B batch, which resulted in the outlawing of that substance. Despite the law, however, the percentage of 2C-B pills on the market then increased as if nothing had happened (DIMS, 1998). In October 1997, atropine, a legally-defined and potent poison, was found to be present in many tablets. This percentage, however, rapidly dropped to zero after a campaign by DIMS to warn users about these pills and the police arrest of a producer.

It appears that in 1998 the percentage of amphetamine, methamphetamine, and "other psycho-active" pills marketed as ecstasy decreased, and the percentage of MDMA pills increased steadily. It would be wrong, however, to interpret this as a return to "normal." There have been several years when the annual average percentage of drugs sold as ecstasy that actually contained MDMA fell below 50 percent of all samples tested (Riemsdijk et al., 1998). However, the year 1997 was an extremely low case. In contrast, in 1998, the other extreme was noted, as the monthly average of MDMA in samples increased rather steadily, resulting in the highest annual average (75 percent) since 1992. Remarkable in 1998 was the low percentage of MDEA tablets, a percentage below that found in any other year

since 1992. This is notable because it has been debated whether there exists (or existed) a separate MDEA sub-market within the ecstasy market.

In their study among first-aid posts at house parties, Bruin et al. (1999) noticed a slight tendency for more health complaints to surface at times when the composition of ecstasy was more uncertain and varying. The variation in the actual compounds present in drug tablets marketed as ecstasy may influence the effectiveness of medical treatment in overdose cases. Overdoses are more common at times when the composition of ecstasy is more uncertain. Amphetamine and methamphetamine are generally taken orally at doses of 5-20 mg. Dosages of two or three times these amounts have been reported but not in inexperienced ecstasy users. Compounds that produce delayed effects, as compared to the more common amphetamine derivatives, may cause users to conclude that they bought a "fake" drug. They may then compensate by taking another pill, accidentally overdosing themselves, or using an unknown cocktail of different compounds.

TABLE 4

TABLETS DELIVERED TO DIMS BY MONTH, 1997 AND 1998

Month	MDMA (%)	MDEA (%)	MDA (%)	MDMA and/or MDEA and/or MDA (%)	Amphet-amine (1) (%)	other psycho-active (2) (%)	other and un-known (3) (%)	N
1997								
January	62	14	1	7	8	6	3	292
February	64	12	1	10	4	4	2	374
March	62	11	1	5	4	10	7	300
April	50	13	1	8	5	10	13	351
May	32	12	0	5	16	19	15	390
June	30	12	2	4	26	11	14	559
July	30	8	0	4	35	11	12	554
August	28	8	0	4	49	8	4	620
September	34	8	0	1	38	8	11	927
October	20	5	1	3	43	15	13	1007
November	27	2	1	4	42	8	16	1019
December	40	1	1	4	36	8	11	672
Total	*34*	*7*	*1*	*4*	*32*	*9*	*11*	*7009*
1998								
January	54	3	1	1	25	7	12	481
February	65	2	0	1	17	8	11	472
March	67	1	1	1	18	7	9	550
April	72	2	1	1	14	7	8	462
May	74	2	0	0	13	8	8	479
June	78	1	0	0	12	5	7	597
July	80	1	3	1	7	3	8	473
August	74	0	4	6	8	3	9	507
September	78	1	3	3	6	4	10	608
October	80	1	3	4	6	1	5	564
November	86	2	2	0	5	4	2	574
December	87	1	3	1	4	3	3	498
Total	*75*	*1*	*2*	*2*	*11*	*5*	*8*	*6436*

1) Amphetamine: all tablets containing amphetamine or methamphetamine, with or without other compounds.
2) Other psycho-active: tablets containing 2C-B, α-MBMA, atropine, ketamine, DOB, MBDB or an ecstasy like compound (MDMA congener), combined with another compound (but not amphetamine).
3) Other and unknown: e.g. caffeine, ephedrine, paracetamol, quinine, yohimbine, other medications, and unknown compounds.

PHARMACOLOGICAL AND TOXIC EFFECTS

Only recently has the pharmacology of ecstasy come under careful scientific scrutiny. Much is still unknown, and many questions are still unanswered. Where the amphetamine class of drugs includes chemicals that produce predominantly stimulant (e.g. methamphetamine), hallucinogenic (e.g. DOB), or appetite suppressant (e.g. fenfluramine) effects, amphetamine derivatives, such as MDMA, MDA, MDEA, and MBDB, produce a varying mixture of stimulant and hallucinogenic effects. MDMA and MDA are described as having only slight hallucinogenic properties, while MDEA is described as having a stronger amphetamine-like stimulant effect than either MDMA or MDA (Pennings et al., 1998). MDMA and MDA appear to have a unique psychopharmacological profile of action (WHO, 1997) that fosters feelings of solidarity, openness, contentment, and ease of contact with other people. Nichols (1986) introduced the term "entactogenic" to represent this combination of psychological effects. MDEA has hardly any entactogenic effect, and little is known of MBDB.

The pharmacological effects of MDMA and its congeners are mediated by monoamines in the brain and its periphery. Like most amphetamine derivatives, it produces increases in heart rate, blood pressure, respiration, and body temperature, and it reduces thirst and appetite. Signs and symptoms of acute intoxication by MDMA and its congeners typically include flushing, sweating, dehydration, tachycardia, hypertension, and sometimes convulsions and severe hyperthermia (Konijn et al., 1997, WHO 1997). Hyperthermia is the most widely documented cause of death due to the use of amphetamine derivatives. Marked weight loss and persistent psychiatric disturbance may develop as manifestations of chronic intoxication, but these are only described at the case level. A growing body of pre-clinical data indicates that MDMA has the potential to damage brain serotonin neurons (Pennings et al., 1998). However, it remains to be determined whether exposed humans, like animals, sustain brain neurotoxicity and, if so, whether this toxicity has functional consequences (WHO, 1997). Clinical evidence shows that amphetamine has a high abuse potential due to its mood-elevating properties, and tolerance to the euphoric action may develop rapidly (WHO, 1997). However, there are very few pre-clinical data that suggest increased tolerance or dependence with repeated use of MDMA.

PUBLIC HEALTH POLICY WITH REGARD TO ECSTASY

ECSTASY POLICY AS PART OF THE GENERAL DRUG POLICY

The key aim of Dutch drug policy is to reduce, to the extent possible, the hazards related to drug use, including those to the users themselves, to their environments, and to society as a whole. The government also strives to prevent a situation in which judicial measures do more damage to the drug users than does the drug use itself (Spruit, 1998). The Dutch Minister of Public Health, Welfare, and Sports is responsible for the coordination of the drug policy and for the policies aimed at prevention and care. The Minister of Justice is responsible for the enforcement of the Opium Act. Early action specifically related to ecstasy was the listing of MDMA and five of its chemical variants on schedule I (hard drugs) of the Opium Act. Below, the most significant issues related to public health policy, justice and law enforcement policy, and finally their mutual influences and recent developments are discussed.

TOWARDS A SPECIFIC SYNTHETIC DRUG POLICY: REGULATION AND PREVENTION

In 1994, ecstasy was the subject of a policy letter prepared by the Minister of Public Health and delivered to the Lower House (Ministerie van WVC, 1994). The policy it provoked was to be implemented under the auspices of a National Ecstasy Working Party. Task forces of experts were appointed to support the group in the areas of prevention and education, guidelines for new legislation, and research, registration, and monitoring. The recommendations submitted by the task forces to the Working Party in 1995 resulted in the issuance of the government memorandum: "City Hall and House: Recommendations for a Policy at the Municipal Level, on the Matter of Large-scale Rave Parties and Dance Drugs" (Ministerie van VWS, 1995). Its objective was to encourage municipalities to develop policies to reduce the potential hazards of ecstasy use at large-scale rave-parties. In doing so, the government incorporated current professional views and knowledge. In the field of prevention, for example, the view was (and is) that effective prevention requires a combination of voluntary restraint on the part of the general population and restrictions imposed by the authorities in the form of appropriate legislation and regulations. Also, the creation of "tailor-made," "on-the-spot" measures at the municipal level – targeting drug, set, and setting – was considered more appropriate than broad appeals or prohibitions, which had proved unsuccessful in the past. Studies in the U.K. concerning fatal accidents had drawn attention to environmental factors associated with conditions at raves that increased health risks (Konijn et al., 1997, Pennings et al. 1998). The findings of these studies encouraged on-the-spot (during rave events) regulations and changes in those ambient circumstances that increased the serious immediate health risks. Prolonged dancing, high environmental temperature, limited availability of cold water or soft drinks, and insufficient ventilation were identified as risk factors that could be reduced. Other factors, such as enforcing room capacity limits for each event, employing an adequate number of properly trained first aid staff, and hiring sufficient security staff for entry checks and body searches, were also identified as contributing to the reduction of hazards.

In the letter accompanying the City Hall and House Memorandum, the Minister wrote, "Despite every government effort [to promote abstinence], there are still young people using these substances" and encouraged local authorities not to refrain from harm reduction. The recommended measures were consistent with initiatives proposed by organizations in the field of prevention and education. An example is the Safe House Campaign, a program launched several years before the City Hall and House Memorandum, which is aimed at the safety and quality of large-scale events. Over the years, the Safe House Campaign has grown into a multi-activities organization. At the present time, upon request, Campaign personnel will consult with local authorities to provide organizers of house parties with general safety recommendations concerning entry policy, air-conditioning, design, first aid, and the like. Directed at the entertainment sector, the bureau executing the campaign provides tips on body searches, security, and training in first aid in drug-related cases (for qualified first aid staff). Campaign personnel are present at the events, provide immediate testing of pills, and draw attention to issues such as high-risk drug use, safe sex, and driving under the influence.

Because of the key role municipal authorities were going to be asked to play, the Ministry of Public Health involved other relevant ministries and umbrella organizations, as well as the Association of Dutch Municipalities (VNG), in the

Memorandum. As a result, this document became widely known, and, according to the findings of evaluation research conducted one year later, many of its recommendations were implemented (SGBO, 1996).

MONITORING, RESEARCH AND REGISTRATION

The ministry places high value on research, and the task force of the Working Party on Research, Monitoring, and Registration developed a coherent program comprised of various scientific research projects. A summary of the results of these studies was published by Spruit in 1997. The most important research questions focused on patterns of ecstasy use (and other drugs) in the dance and party circuits and on health hazards. There were also questions about the existing chemical monitor, DIMS. Before this, there had been virtually no knowledge about patterns of use either during large-scale house parties or in regular establishments frequented by young people, and there were calls for an "authoritative overview" of the medical and pharmacological effects of ecstasy and ecstasy-like preparations. In addition, it was considered necessary to develop a registry of emergency hospital admissions and problems treated at first-aid facilities.

The results of the research into emergency admissions and first-aid visits are described in the paragraph on treatment data. The extensive review of the literature on the drug's medical and pharmacological effects (Konijn et al., 1997) resulted in a detailed overview of existing knowledge and in the identification of gaps and risk factors. The external risk factors associated with acute complications include the uncertain composition of "ecstasy" pills and the circumstances surrounding its use (not consuming enough fluids, the high level of noise, people in close proximity to each other, and, in particular, a relatively high ambient temperature). In addition to these external factors, there are various individual concerns, such as underlying disorders, the potential for an allergic reaction, unusual sensitivity to the chemical(s), and the like. Most of the policy questions centered on the potential of MDMA to damage brain serotonin neurons. The Minister decided that research into this question should be initiated, and this began in 1997.

Regarding patterns of use, field research was executed by Wijngaart et al. (1997) at 10 large-scale rave parties in different parts of the country, among a sample of 1121 participants (see also Wijngaart in this issue). They found that one-fifth of the subjects had not used any illicit drug during "the past night," while nearly two-thirds (64 percent) indicated that they had used ecstasy. Other drugs consumed included tobacco (75 percent), cannabis (41 percent), alcohol (34 percent), and amphetamine (34 percent). As these figures indicate, the use of more than one legal and/or illicit drug in various combinations is not uncommon at these events. Of those who had used ecstasy more than once in their lives, 6 percent were classified as "excessive users" (defined here as more than once a week). It is evident, too, that ecstasy consumption can fluctuate, at times being used frequently and then not being used at all for a while. At regular establishments, fewer people overall used ecstasy, although a disproportionate number of those who did were heavy users.

In the Wijngaart study, respondents were asked whether they had experienced health problems, either short or long term, after attending a house party. The

complaints most commonly mentioned included a loss of appetite (39 percent reported this), and a total of 9 percent of these persons were seriously underweight by the Quetelet Index standard. Additional complaints included muscular pain (25 percent), feeling miserable (18 percent), and forgetfulness (21 percent). It is difficult to ascribe these symptoms solely to ecstasy use, however, since these people also dance continually throughout the night and may do this several times a month. A total of 12 percent of the party visitors reported having some type of chronic health disorder. Profiles were constructed of groups that seemed to be at particular health risk. These profiles were based on the characteristics of respondents who had been sick at a party, frequently went to a first-aid post for attention, and those who experienced health complaints after a house party. Although the existence of a chronic disorder and tobacco use turned out to be factors posing some risk, the combined use of ecstasy and amphetamine turned out to be the most important drug-related health risk factor. Several other factors were identified that increase the likelihood that users would experience health problems, including the absence of a social safety net, having a network of friends who also use ecstasy and amphetamine, frequent partying through the weekend without sufficient sleep, and not having access to a regular and trusted dealer (the latter probably indicating a higher risk of buying ecstasy of uncertain composition).

The locations where large-scale house or rave party events are organized are usually not equipped for such parties, so numerous supplemental facilities must be specially organized for each party. During their large-scale house party observations, Wijngaart et al. (1997) paid special attention to environmental conditions that contributed to or jeopardized participant safety. On the positive side, they found (as recommended in the "City House and Hall" memorandum of the Minister of Health) a "chill-out" room and first aid posts at all locations, and non-alcoholic beverages and water were readily available, although seldom for free. Negative factors included the need for improvement in terms of ambient room temperature, noise, and/or air humidity levels. In contrast to the large-scale events, requisite facilities are not largely available at regular establishments like discotheques, cafes, or large pubs, small party cellars, etc., where many smaller-scale parties are regularly held. The research by Wijngaart et al. (1997) shows that often there is no "chill-out" area available, room temperatures are generally higher, there is a more relaxed policy in terms of searches and seizures at the entrance, and they seldom have any first-aid facility. However, these establishments do usually provide free drinking water from the tap (which is customary in this country). The scope of the City Hall and House Memorandum is, however, not easily expandable to these establishments. Large-scale house party events require local administrative approval, so demands regarding facilities and other ambient, safety, public order, and law enforcement factors can easily be made by the authorities each time permission is negotiated by the organizers. Regular recreational establishments like discotheques, cafes, and other nightlife venues, must be licensed, the requisites of which are embedded in general administrative and legal rules and regulations at the local and/or national level. Changes in these requirements targeted at harm reduction for drug users would not only be administratively far more complicated but would also affect the other (legal and socially desirable) recreational functions and economic position of the entire

entertainment sector (which, of course, claims that drug use on their premises is negligible).

Since 1992, the Ministry of Public Health has financially supported the DIMS (Drugs Information and Monitoring System). As noted earlier, this program's main task is to monitor synthetic drug markets. In order to accomplish this goal, DIMS, among other things, routinely collects drug samples for analysis. This is accomplished in 21 offices funded by the professional Dutch drug assistance and care facilities and by prevention organizations like the one conducting the Safe House Campaign. At these locations, people can anonymously hand in pills or other preparations to be tested for their chemical composition. In this manner, DIMS staff can quickly provide correct information about preparations circulating in the market. The person submitting the sample is informed about the main compound(s) found in his or her particular pill. Whenever a chemical analysis of the samples is necessary, the collection center sends them to a laboratory. The latter situation occurs when the pill cannot be recognized by a special method the DIMS organization has developed for identifying between 40 and 60 percent of those submitted. This approach is also used in the Safe House Campaign. The task force of the Working Party considered two critical questions regarding these drug-testing procedures: 1) are the methods used for testing (recognition by the DIMS visual identification method as well as chemical laboratory analysis) substances reliable? and 2) does the testing of pills at house parties encourage ecstasy use? If the latter were found to be true, it would appear that this practice actually undermines prevention goals. A chemical audit was conducted, and it was determined that these methods were accurate in identifying constituent compounds. In order to answer the second question, participants at house parties were interviewed regarding their views on this subject in the aforementioned research of Wijngaart et al. (1997). Responses indicated that the presence of testing facilities was unrelated to participants drug use. A more important result is that the measurement of ecstasy consumption (last night prevalence) showed that ecstasy use was not higher, and was sometimes even lower, in those places where testing facilities were available. The researchers concluded that there was no statistically significant relationship between the presence of testing facilities and the prevalence of ecstasy consumption during house parties.

JUSTICE POLICY WITH REGARD TO ECSTASY

Curbing the supply of ecstasy and other illicit drugs is an important aim of Dutch drug policy. This is the responsibility of the Minister of Justice. Measures have been implemented to counter trafficking and production (Planije et al., 1998b), both directly through the Opium Act and indirectly through legislation designed to curb money-laundering practices and by depriving convicted defendants of the illicit gains of their criminal efforts. These laws are primarily targeted at organized crime, which is thought to play an important role in drug trafficking.

In 1988, MDMA and five of its chemical cousins were outlawed and listed on Schedule I (hard drugs) of the Dutch Opium Act. The Opium 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 is punishable by law. This also covers activities preparatory to trafficking in hard drugs. The use of drugs itself is not punishable by law, however. In 1993, MDEA was added to the list, and, in 1997, 2C-B was included. Evidence of large-scale production and trading in these substances was the reason for the original ministerial order in 1988 and was again the case in 1997 (Laar et al., 1996; DIMS, 1998).

In 1995, a law was passed titled "Prevention of the Misuse of Chemicals," designed specifically to expand and improve earlier regulations for synthetic drugs. This law outlawed the possession and trafficking of chemicals that can be used as precursors of synthetic drugs by anyone who does not have a permit to possess, import, export, or transit scheduled substances. It also expanded the judicial grounds for seizures and made it possible to convict people for possession of substances from which synthetic drugs can be manufactured. There is also now a requirement that anyone involved in the trade must report any suspicious transactions. The Netherlands is the only country in the European Union where a failure to report such activities is considered an offense (Pieters, 1998).

In 1995, the collaborating Ministries of Health, Justice, and Home Affairs developed a document outlining the future drug policy, "Drugs Policy in the Netherlands, Continuity and Change" (Ministry of Foreign Affairs, Ministry of Health, Welfare and Sport, Ministry of Justice, Ministry of the Interior, 1995). In it, they explained that the Dutch view is that the interests that have to be protected by the drug law are primarily health concerns. However, three factors complicated the implementation of this policy and prompted amendments for tackling the drug problem. These complications included the public nuisance caused by drug users, the involvement of organized crime in drug trafficking, and criticism from abroad of both imagined and real external effects of the Dutch policy. New laws, a public nuisance policy at the local level, and international co-operation in criminal investigations and prosecutions were the instruments adopted to in response to these new problems (see also Boekhout van Solinge in this issue).

DATA OUT OF CRIMINAL INVESTIGATIONS

Between 1990 and 1996, there was a sharp increase in the number and quantity of amphetamine and ecstasy seizures in European Union countries. The number of kilograms of ecstasy seized in Austria, Belgium, Denmark, France, Ireland, Italy, Luxembourg, Spain, Sweden, and the U.K. was zero in 1990 but close to 15,000 in 1996 (EMCDDA, 1998). Dutch data are lacking for this period and, therefore, are not included here.

In the Netherlands, criminal investigations uncover synthetic drugs in powder, liquid, and tablet form. Data on these batches are stored in the Central Criminal Investigation Information Service's database (CRI: Centrale Recherche Informatiedienst). There are different ways of estimating the contents of each of these batches (amounts are estimated in kilograms, numbers of pills or tablets, or liters of liquids). Trying to discern trends on the basis of these figures is, as is demonstrated in Table 5 (Planije et al., 1998a), almost impossible. Not only are conversion rates between different measures absent, but the categorization itself seems debatable. The differences between data contained in different databases (CRI, DIMS, Forensic Science Laboratory) raise questions that are currently unanswered. One question is whether all the intercepted liters of MDMA really are MDMA or the precursor

PMK. Another question is whether there are only pills containing MDMA and MDEA seized or whether this category includes all kinds of amphetamine derivatives, as the data out of the DIMS and the Forensic Science Laboratory (Gerechtelijk Laboratorium, 1998) indicate.

TABLE 5

SYNTHETIC DRUG SEIZURES MADE BY THE POLICE, CUSTOMS, AND THE ROYAL MILITARY CONSTABLE 1990-1997*

	1990	1991	1992	1993	1994	1995	1996	1997*
MDMA								
kgs	0.3	0.7	300	1.5	31	391	277	
liters	-	-	-	2	-	69.5		
pills	48	-	10,286	1,625,391	45,737	48,418	1,498,940	1,054,918
MDEA								
kgs	-	-				-	73	
pills			188,532	52,053	81,300		800,636	
Amphetamine								
kgs	47	128	267	293	215	45	324	
liters	7	120	60	2	1.160	-		
pills	2,500	-	30,705	142	11,025	850	1,025	

*) The 1997 figures are still preliminary and incomplete; the 1997 data on MDMA may also contain other derivatives of MDMA; in 1997 some 400 liters PMK (raw material for MDMA) and 10,800 liters BMK (raw material for amphetamine) were seized too.

The figures identifying the number of dismantled ecstasy laboratories appear to give a better perspective on trends between the years 1992-1996. In 1992, one such laboratory was found. Three were identified in 1993, and five in 1994. After that, a steep increase occurred in 1995, when 15 laboratories were dismantled. In 1996, there were 10. The 1997 figures are not yet available.

Unfortunately, there are no simple links between trends in the use of ecstasy, the chemical composition of the ecstasy that is currently on the market, and the number of police seizures or the number of dismantled laboratories. Ecstasy may be imported as well as exported, and some products are made in the Netherlands for the Dutch market. The MDMA and MDEA seized may have been (partly) produced for the internal market, for export, or may have been in transit to other countries. Seized substances other than MDMA and MDEA are not reported, except by the Forensic Science Laboratory (Huizer et al., 1997), and then only in terms of numbers of compounds encountered in a small sample of each seized batch. Of course, these data are also influenced by police activities and criminal investigation policy. Criminal investigation policy changes occurring at the regional and national levels influence the number of seizures just as much as criminal activity does, making it difficult to interpret the factors causing a particular identified trend.

Simply looking at the number of dismantled laboratories does not indicate what was actually being manufactured in them. This information can only be learned by linking the data about the laboratories to the charges brought against the people owning or working in them. For example, by comparing data from DIMS, the Forensic Science Laboratory, newspaper accounts, and other documents (Sorgdrager, 1998), it is evident that, in 1997, the police seized a large

number of pills being sold as ecstasy that were actually comprised of the legal poison atropine.

CRIMINAL INVESTIGATION AND PROSECUTION POLICY

In 1996, the Prosecuting Counsel reviewed the guidelines for investigating and prosecuting offenses against the Opium Act (College van Procureurs-Generaal, 1996). These guidelines established priorities in the investigation and prosecution of Opium Act offenses. Formerly, the import and export of drugs had been accorded the highest priority (they were, and still are, subject to the stiffest sentences). In 1996, all punishable offenses involving hard drugs, including possession for other than individual use, trade, sale, transport, and production, were all targeted for criminal investigation and prosecution. In the Netherlands, the use of drugs itself is not punishable, although it is difficult to use a drug if one does not possess it in the legal sense, if only for a single minute. Therefore, the quantities leading to prosecution for possession for individual use are defined by the Public Prosecutor. The new guidelines redefined the quantities of possession for individual use, the new definitions being as low as possible and, in several cases, lower than they formerly were. The underlying principles of the new guidelines explicitly stated that there would be only one policy for all Schedule I substances. In the case of ecstasy, this turns out to have consequences, whether unforeseen or intended, for the individual ecstasy user, even if he or she is only a recreational user. There are several reasons for this. One is that the definition of possession for personal use is one pill or capsule or less than 0.5 grams (powders). If such an amount is found in the possession of an individual, the guidelines prescribe police dismissal. However, on average, people now use two pills per occasion (Wijngaart et al., 1997), and experienced or chronic users generally consume more than two pills. Furthermore, partying is a social activity, and the majority of people go to parties (whether large-scale events or in regular establishments) in small groups. In some groups, everyone smuggles his own ecstasy into the party or buys it there; in other groups, it is common for one (or two) person(s) to buy the night's supply for the entire group. Socially, this is possession for individual use, while legally, it is possession for criminal dealing. The sentence users risk (if the person arrested has no more than 10 pills or 5 grams) for this behavior ranges from one week suspended sentence to two months in prison. Another reason why this guideline is divorced from social reality and from the Public Prosecutor's own policy (expending investigation and prosecution efforts on individual use is still officially accorded a low priority) concerns the recommended police behavior in case they encounter a person possessing 1 pill or less than 0.5 grams. "In these cases care and assistance to the user have to be put first," the Public Prosecutor states (College van Procureurs Generaal, 1996: 12) and calls for early contact with treatment facilities in order for users to obtain needed assistance. This guideline is fine for heroin users, as they may indeed profit from such an opportunity because special assistance programs are created for such situations. In the case of ecstasy, however, few people who use only one pill will be defined as being in need of care and assistance (see also the figures in the paragraph on treatment data), and there are no assistance programs for these situations (there are not enough places in the facilities for care and assistance, and there would not be enough manpower to manage them). Thus, it

is questionable whether the rigid adoption of a single strategy for all Schedule I substances, putting ecstasy in the same category as heroin and cocaine, makes sense.

In 1997, the Unit Synthetic Drugs (USD) was formed at the national level as a temporary special branch of the Public Prosecutor and the police force to improve ecstasy and amphetamine-related criminal investigations and prosecutions. This is a three-year project that calls for collaboration between the public prosecutor and the police, customs, the economic control service, the central criminal investigation information service (CRI), the railway police, the river police, the tax intelligence service (FIOD), etc. The USD conducts criminal investigations, but it is also expected to develop policy initiatives regarding synthetic drugs. One such policy was to concentrate government attention and efforts on producers and big traffickers. Consequently, they are not very interested in pursuing small-scale dealers and are not at all interested in actions concentrating on users. Since police manpower, as well as that of the judicial system, is limited, the efficiency of these new cooperative efforts should improve the results of criminal investigations and prosecutions regarding these substances (Pieters and Reijnders, 1997).

PUBLIC NUISANCE POLICY AND THE MAINTENANCE OF PUBLIC ORDER

The term "nuisance" is the current Dutch political and policy term for the effects of undesirable social behavior on other citizens in the public order domain, varying from mild inconveniences to severe harassment. In 1993, a national policy was introduced to counter nuisance caused by the trade in and use of drugs. These problems exist in many forms: crime, aggression and violence, deviant public behavior, and disturbance of the public order, such as gathering of customers at dealer locations, decreasing property values in the vicinity of dealer locations, citizens' feelings of a lack of safety at home and in the neighborhood, etc. The nuisance issues specifically identified with ecstasy use are more or less the same types of concerns related to pubs and bars: noise, traffic, parking, and, to some extent, deviant public behavior.

The central policy to reduce drug-related nuisance caused by addicts was to be interpreted on a regional basis, under the responsibility of 26 "nuisance municipalities." Over the years, this regional responsibility for policy combating drug-related nuisances has become increasingly important. The regional policy is a matter for the municipalities, police, and public prosecution service. The mayor, police commissioner, and public prosecutor in each region meet for "tripartite deliberations." Each of these three parties is expected to contribute to the design and implementation of a coherent and effective regional policy. It took some time before the parties became accustomed to working together on this new method of cooperative policy-making, but, over time, they developed good working relationships and decision-making (Planije and Spruit, 1999). Examples of issues of importance in regional drug nuisance policy are policy options concerning coffee shops, dealer-locations or dealer-houses, compulsory treatment, the regional enforcement of the Opium Act, etc. Regarding ecstasy, large-scale house parties in particular and people's behavior in public are important issues (e.g. people being drunk and disorderly and/or "drug disorderly," violence and aggression, driving under the influence of drugs and/or alcohol, and

related issues like the opening hours of establishments and law and public order enforcement in regular night life venues and during house parties, etc.). Within the tripartite deliberations, decisions could be made about whether or not large-scale rave events would be permitted at all within the municipality's borders and, if so, whether or not they would demand facilities and regulations like the ones advised in the Minister's "City Hall and House" memorandum, whether or not they would permit the presence of the Safe House Campaign and pill testing, whether or not to pursue criminal investigations during the house party, which guidelines the police would follow to maintain public order, and so on.

This worked out quite well for a few years, but, over time, other important issues that were not drug related surfaced at the regional level concerning public order and safety and requiring policy attention. To counter a wide variety of problems, like citizens' feelings of insecurity on the streets, nuisance and petty crime in general, parking in non-parking zones, and ambient pollution, an increasing number of municipalities have embraced zero-tolerance policies. These local directives have included intolerance of drug users, a stance that could, and in some regions did, place them in conflict with the policy embraced in "City Hall and House," as well as with that favored by the Synthetic Drugs Unit (USD). An example is what happens when a regional zero-tolerance policy in general is combined with the decision to permit rave party events following "City Hall and House," including the Safe House Campaign and drug testing on the one hand. If there is no zero-tolerance policy, most police activity focuses on entries to and exits from the party at its beginning and its end. During the party, they are present but not in great numbers, and their presence is predominantly for the purpose of maintaining public order in case things go wrong. On the other hand, if there is a zero-tolerance policy, the police are densely and visibly present inside and arrest small dealers (which legally can include anyone using drugs and possessing more than one pill or another legal standard amount). Such actions interfere with the preventive activities of the Safe House Campaign and several of the City Hall and House recommendations, and, of course, the very presence of a drug-testing facility is very strange in such circumstances. In 1998, the Prosecuting Counsel took a position (College van Procureurs-Generaal, 1998) recommending that all regions assign top priority to a "preventive health approach" once a house party was underway, and this includes the operation of a pill testing facility. The communication of this position has to be interpreted as powerful support for the Health Minister's "City Hall and House" advice. However, the Public Prosecutor maintained the suggestions regarding the investigation and seizure of pills on the dance floor (possession of a small amount for personal use is not to be pursued, while large-scale trafficking would always be prosecuted).

A second example concerns a lack of harmony between the public nuisance policy and the criminal investigation policy of Synthetic Drugs Unit (USD), which is also approved by the Public Prosecutor. The Unit's policy is to focus its attention on criminal investigations designed to catch the "big fish" (producers and traffickers), while hardly paying attention to users. Influenced by the differences in importance attached to a zero-tolerance public nuisance policy, there are substantial regional differences in terms of how the efforts of the regional police forces are targeted. In some regions, most efforts go toward the control of public nuisance by, among other things, watching closely over

partygoers and people using ecstasy (or other drugs). In other regions, most efforts go to combat crime by identifying and pursuing laboratories, producers, and traffickers (Moerland and Boerman, 1998).

RECENT POLICY DEVELOPMENTS

A NEW PREVENTION APPROACH

The positive response to the City Hall and House Memorandum (SGBO, 1996) and the results of the ecstasy research monitoring and registration program (Spruit, 1997) led the Minister of Health to conclude that prevention efforts should not be limited to house parties only or just to the general public. Instead, regular nightlife venues and young people in general should be sought out for special attention. The ministry also felt that it was important that prevention organizations work cooperatively in these endeavors.

Beginning in 1998, a drug prevention program was being developed to target young people thought to be especially susceptible to the lure of drugs (Wetser and de Jong, 1998). The principles underlying this program are that consistent messages should be developed and then delivered, whether in the form of information leaflets or television spots, and that prevention activities must be jointly developed by all interested organizations. These cooperating organizations can include the community health service, first aid, and addiction care facilities, but may also involve the entertainment and recreation sector, the local police force, and representatives of the municipality. However, this is not the only means of achieving consistency. An important principle is that this program specifically targets young people and general concerns with health. This means that ecstasy will not be a singular focus. Furthermore the target group will be approached in three different locations: at leisure activity places, at school, and at home. Finally, health messages will be dispatched in incidental campaigns (such as on radio, television, billboards, or educational messages in GPs' waiting rooms, schools, bars, discotheques, etc.) and in structured activities, such as the "Healthy School and Stimulants" program, that include drug education for pupils and parents, teachers and directors. Because this program is just now beginning, its impact can not yet be measured.

NEW SYNTHETIC DRUGS, THE EARLY WARNING SYSTEM AND RISK ASSESSMENT

One byproduct of the Dutch presidency of the European Union in 1997 was the adoption of a joint action obliging member states to participate in an Early Warning System (EWS). This was especially aimed at supplying authorities responsible for drug policy at the national and European levels with early notice of new synthetic substances appearing on the illicit drug market, substances which are not specifically outlawed but that do have a strong resemblance to illicit drugs (listed in any of the schedules to the 1971 UN Convention on Psychotropic Substances). However, not only is the early notice and reporting of new drug content of importance. The Early Warning System includes a health and social risk assessment to rapidly follow the notice of a new compound, along with proposals for an adequate policy reaction. The early notices are strictly for substances with limited therapeutic value that pose public health or social hazards similar to those for substances listed in schedules I and II. These compounds, expected to appear predominantly in preparations marketed as ecstasy, have to be

reported to the European Monitoring Center on Drugs and Drug Addiction (EMCDDA) through the vehicle of the national focal point reports or to Europol. The national focal points are the agencies (usually a small sub-department in a ministry) in each EU country that collect the data required by the EMCDDA. They exist at the national level and, in general, cooperate with the EMCDDA and act as go-betweens for this European monitoring group and the national governments. Special meetings are convened by the EMCDDA to assess the risks associated with newly-discovered compounds and to report and recommend appropriate action to the European Union.

The idea of the Early Warning System is to quickly respond to the ongoing development of new synthetic compounds in European countries. The possibilities for developing and marketing such drugs appear to be especially likely compared to the more traditional drugs like marijuana, hashish, heroin, and cocaine. The idea of conducting a thoughtful risk assessment before banning each new compound appearing on the market was intended to prevent jeopardizing a fragile emerging equilibrium between an EU public health and a repressive approach (Keizer, 1998) and to encourage the EU to avoid participating in a vicious cycle of armed competition between illegal producers inventing newly-composed synthetic drugs and "the law." This could result in new and increasing harms for those caught up in such a competition.

In the Netherlands, a working party was formed with representative experts from both the fields of public health and justice and asked to develop the requisites for a Dutch Early Warning System at the national level. In order to accomplish this, they created CAM (Co-ordinative agency for the health and social risks Assessment and Monitoring of new synthetic drugs), placing the new organization within the Public Health Inspectorate. A national risk assessment is now done whenever a new compound is reported by the chemical monitor DIMS, the forensic science laboratory, the Synthetic Drugs Unit, or other bodies from the field of health care or justice. Their task is to actively collect information, to initiate risk assessment, to preside over a circle of experts who assess the risks, and to decide whether the reported compound is so hazardous that preventive measures should be taken immediately. CAM also determines whether judicial intervention or outlawing of the substance should be recommended, whether additional legislation or regulations should be proposed to the ministers, and whether the substance has to be reported internationally to the EMCDDA. The methods employed by CAM for the Dutch national risk assessment were soon adopted and then elaborated on by the EMCDDA. Indicators used to assess the health and social risks are primarily of a pharmacological and toxicological nature (the properties of the compounds themselves), but they also include (among other things) the patterns and the extent of substance use and misuse and the seriousness and harms of related criminal involvement.

DISCUSSION

The Dutch government is committed to the maintenance of its integrated approach in the form of a balanced two-track public health and justice drug policy supported by ongoing scientific evaluation. There is evidence, as in the case of the policy regarding synthetic drug testing, that both components are rigorously committed to this enterprise. Despite these cooperative efforts, however, the

integration of approaches is not always easy to maintain. Interests and strategies may conflict when synthetic drug policies that seem clear in and of themselves work out differently in the field. An example is the zero-tolerance policy regarding public nuisance. These measures were introduced because of emerging concerns about public order generally, rather than because of drug use per se. However, the measures resulting from this policy may counteract others designed to reduce drug related harm (e.g. at house parties).

Drug policy and its implementation always involve a kind of balancing act between competing interests. For example, we have noted that it is the Public Prosecutor's policy to maintain one criminal investigation and prosecution strategy for all schedule I (hard drug) cases. Although this may work out well for combating production and trafficking, difficulties appear when drug users are caught up in the net. Over the years, a unique set of arrangements have been designed to deal with this situation but only for the users of addictive substances like heroin or of schedule II substances (cannabis). These arrangements are not so suitable in cases involving a non-addictive and non-schedule II synthetic drug like ecstasy.

The maintenance of a balanced, two-track approach is a challenging enterprise, requiring a never-ending commitment and a constant effort to stay alert to new developments in society. However, the public health policy uses and funds more scientific research and monitoring than the justice policy does (Planije and Spruit, 1999). Maybe this is why it appears to show more internal coherence and has, to a greater extent, avoided dysfunctional measures alienated from the real social world. The latest and biggest challenge to the maintenance of a balanced approach to drug policy so far is that, at present, new and sweeping societal changes, unrelated to drug use, are occurring at the national and supra national levels, complicating even further the task of effective drug control policy making.

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