# Ecstasy and other synthetic drugs in France: situation portrayed by the SINTES information system, 1999-2002

Set up in 1999, as a part of the implementation of the three-years plan for the fight against drugs and to prevent dependence, SINTES (the national poison/substance identification system) has made up for the lack of data on synthetic drugs consumed in France. It was set up in response to two requirements: on the one hand, to provide information on these substances (form, composition, dosage) and on the users and the contexts of use; on the other hand, to provide the French response to the obligations under the European Joint Action of 16 June 1997 to create a mechanism for rapid exchange of information on new synthetic drugs.

The term "synthetic drugs" is a generic designation, related to the more colloquial term "designer drugs". It covers substances that vary as much in their chemical composition as in their effects. The two compounds most frequently encountered are <u>methylenedioxymethamphetamine</u> (MDMA) or ecstasy and amphetamine.

This issue of *Trends* presents the main results of the report, *Regards sur l'ecstasy*, published in 2003.

# METHODOLOGY



### Figure 1: Sources of information for the SINTES system

*Trends No. 32 September 2003* 

- The **toxicological analysis laboratories**: the Inter-Regional Laboratory of the Ile-de-France Customs, the forensic science laboratory of Lyon, the hospital laboratories Fernand Widal, Paris (CEIP), Salvator, Marseille (CEIP) and CHU, Caen (CEIP).
- The law enforcement services of the Police, Customs and Gendarmerie
- The social health network, superimposed to a large extent on the TREND<sup>1</sup> co-ordination points. CEID (Bordeaux); Médecins du Monde "techno party event missions" (Bayonne, Nice, Paris); SEDAP (Dijon); Spiritek (Lille); Liberté (Bagneux); CMSEA (Metz); CIRDD (Rennes), CNDT (Lyon); Graphiti (Toulouse). Some fifty collectors, some members of associations (Pushing, Keep Smiling etc.) active in prevention and risk reduction in the club and party scene, others, health and social field workers (nurses, educationalists, interventional addiction practioners).

# THE PRODUCTS

On the 30 June 2002, 5,202 results had been added to the SINTES database. 40 % of the products were collected, the rest were the result of seizures by the Customs (35 %), Police (23 %) and the Gendarmerie (1 %). The products collected under the system were mostly in the form of tablets (74 %). Then came powders (14 %), paper blotter (4 %), capsules (4 %), liquids (1 %), vegetable matter, mushrooms and other forms (3 %).

# What do the tablets in the SINTES database contain?

More than 8 tablets out of 10 contain MDMA (ecstasy). In the majority (85 %), this is the only active ingredient but an ecstasy tablet is never pure and always includes inactive ingredients (excipients). Nine tablets out of ten contain at least one amphetamine compound (MDMA, amphetamine, methamphetamine, MDEA, MDA). The composition of all tablets collected is shown in detail in the following table<sup>2</sup>.

	Befor	·e 2002	1 <sup>st</sup> half, 2002		
	Ν	%	Ν	%	
MDMA (ecstasy)	2 572	81	541	85	
MDA	101	3	12	2	
MDEA	87	3	28	4	
Amphetamine	175	6	45	7	
Methamphetamine	20	1	18	3	
Ephedrine, Pseudo ephedrine	32	1	1	<1	
At least one amphetamine	2 771	87	575	90	
Cocaine	2	<1	2	<1	
Caffeine	231	7	47	7	
Anaesthetics**	10	<1	0	0	
Hallucinogens***	1	<1	0	0	
At least one medicinal substance	159	5	49	8	
No psychoactive substance	293	9	40	6	
Total number of tablets analysed	3 180	100	640	100	

Table 1: Composition of tablets	analysed	in t	he	SINTES	system	(collections	and
seizures) from 1999 to 30 June 2002	2						

<sup>&</sup>lt;sup>1</sup> TREND monitoring system: Recent trends and new drugs

<sup>&</sup>lt;sup>2</sup> Issue 31 of Trends summarised the composition of synthetic drugs (tablets, capsules, powders etc.) for 2002.

\*: At least one amphetamine: products containing at least one of the following: MDMA, MDEA, MDA, amphetamine, methamphetamine

\*\*\* : anaesthetics: products containing at least one of the following: ketamine, Gamma-OH, lidocaine \*\*\*\* : hallucinogens: products containing at least one of the following: psilocybine, psilocine, LSD

Source: OFDT, SINTES 2003

Interpretation: Of the 3,180 tablets analysed before 2002, 2,572 or 81% contained MDMA. Since a tablet can contain several active ingredients (e.g. MDMA and caffeine), the sum of percentages is greater than 100.

# **AMPHETAMINES**

The psychoactive substances most frequently identified in the SINTES database are **amphetamines**<sup>3</sup>. Their common precursor is ephedrine, which was used for thousands of years on account of its stimulating properties. Amphetamines exhibit three properties, each more or less marked, according to the compound concerned.

- physical and psychic **stimulant**: amphetamine(speed), methamphetamine (ice, crystal-meth, yaba...), etc,
- euphoriant: MDMA (called ecstasy or XTC), MDEA, MDA, MDE, etc,
- hallucogenic: PMA, 2C-B, TMA-2, DOB, 2C-T7, 2C-T2, 4-MTA, etc.

These stimulants products are controlled (banned from sale to the public). They are anorexients. Acute intoxication is characterised by the following symptoms: hyperactivity, confusion, anxiety. hallucinations, aggression and serotonin syndrome (delirium, rising temperature, cardio-respiratory failure). Amphetamine and methamphetamine are potentially neurotoxic in the long term and can induce a psychic dependency and tolerance.

Caffeine is found (stimulant and dilution substance) in 7% of all tablets. Other psychoactive substances are rare. One in 20 tablets is, in fact, a medicine (chloroquine paracetamol, benzodiazepines, etc). Proprietary medicines are more in evidence in products collected from users than in the products seized by the law enforcement services (trickery is carried out on a small scale and not within the context of medium to large scale trafficking).

The ecstasy tablets analysed contained, on average, 66mg of MDMA but the dosages observed vary considerably (from a minimum of 1 mg to a maximum of 268 mg). The average dosage of MDMA decreased between 2000 and 2002, both in collections and in seizures (figure 2). Even if the proportion of high-dosed tablets has decreased, tablets with more than 100 mg of MDMA<sup>4</sup> were identified in 8 out of 10 of the most frequently collected "logos".

 $<sup>\</sup>frac{3}{2}$  Amphetamine , MDMA, MDEA, PMA, 2-CB, TMA-2, 2C-T2, bupropion are the subject of information notes, which figure in the report and are available on-line: www.ofdt.fr.

<sup>&</sup>lt;sup>4</sup> See information notes on www.ofdt.fr

Figure 2: Average dosage of MDMA for the tablets collected (social health facilities) and seized (by Customs, Police and Gendarmerie), per quarter, from 1999 to June 30, 2002.



# Source: OFDT, SINTES 2003

For any one "logo", the difference between the minimum and maximum dosage is, "at best", from one to three times. It can range from 1 to 20: for example, the highest strength "Heart" (125 mg of MDMA) is more than 20 times "stronger" than the lowest strength "Heart" (6 mg). This makes the element of risk very substantial for a user who believes that a known "logo" guarantees him a stable dosage of MDMA (figure 3)





### Source: OFDT, SINTES 2003

Interpretation: the "Mitsubishi" tablets collected by the social health facilities contained a minimum of 15 mg and a maximum of 122 mg of MDMA (or 8 times stronger than the lowest Mitsubishi strength). 50% of tablets bearing the "Mitsubishi" logo contained a dosage between 38 and 79 mg.

Given the variability of drug making processes (in particular the so-called "home-made" ones), there is also a hazard presence of other psychoactive substances. Amongst the tablets dealt within the analysis above, other substances were sometimes identified: PMA, 2C-B, 2-CT7, 4-MTA, DOB, metamphetamine, MDA, MDEA, medicines, etc.

**Powders**: in a large extent barely half the powders contained an amphetamine: mostly amphetamine (22%), MDMA (19%) and methamphetamine (4%). Amongst the powders containing some MDMA, the proportion of those which contained no other active ingredient (52%) was clearly lower than that of tablets (85%). The powder was much more often cut with other psychoactive compounds despite the reputation which MDMA powder enjoys with users.

One third of the powders collected contained caffeine and a quarter contained medicinal substances: three times out of four, this was paracetamol (the active ingredient of Doliprane®). The other medicines identified were chloroquine (Nivaquine®), benzodiazepines, aspirin, antibiotics, barbiturates, anti-inflammatories, anaesthetic (ketamine, Gamma-OH, lidocaine) and 5% of powders contained cocaine. A quarter contained no active ingredient (only sugar, starch glucose etc).

**Capsules**: 14% of the capsules seized contained MDMA compared with 64% for capsules collected. Four times out of ten, these capsules were cut with medicinal compounds (chloroquine, paracetamol, non-steroid anti-inflammatories etc.). The powders and the capsules were most frequently collected by the social health network, a fact which fit with the observation that the availability of this form<sup>5</sup> is increasing (MDMA which previously came in the shape of ecstasy tablets is now to be found in both powder and capsule forms).

**Paper blotters**: LSD is the most frequently found psychoactive substance (43% of samples). About 1 tab in 5 (18%) contained an amphetamine. Almost a quarter handed in contained no psychoactive substance.

**Liquids**: a quarter of liquids handed in contained anaesthetics and, in particular, Gamma-OH. Despite significant media coverage, Gamma OH or GHB remains a product which rarely appears on the SINTES database (15 samples). No active substance was found in 40% of the liquids which were seized and in 18% of the liquids collected.

# New and rare substances identified during the period 1999-2002.

Certain amphetamines were the subject of information notes because of their potential danger and their novelty (2-CB, 2C-T2, 4-MTA, PMA), as well as the following substances: dextromethorphane or DXM, an antitussive opiate, chemically similar to codeine; bupropion or Zyban® (tobacco detoxification treatment) and tiletamine, a human and veterinary anaesthetic. The identification of this last substance by the SINTES system led to a health alert amongst professionals in the health service, issued by the French French health products safety agency (AFSSAPS) and the General Health Executive (DGS). On a European level, SINTES has contributed to the rapid response system by collecting and identifying TMA-2 and 2CT-2 for the first time in France in 2002.

 $<sup>\</sup>frac{5}{2}$  TREND report, 2003

# USERS, USES AND CONTEXTUAL DATA

# Consumers and methods of use

More than 2000 questionnaires were completed. Half the consumers encountered were between 21 and 25 years of age. The age-group distribution has been practically constant since 1999. More than 8 consumers in 10 were male. Almost all tablets (99%) and capsules (98%) were intended to be swallowed. The powders, on the other hand, can be taken in various ways: more than half (59%) were for snorting and 7% of samples were for injection. The prevalence of snorting is increasing: in 2002, more than two thirds of the powders collected were for snorting and a quarter for swallowing.

# Multiple substance consumption: cannabis and alcohol take first place

Of the "consumers under the influence" and the "potential consumers", one in eight (12%) had consumed only the substance collected; the other combined it with one or more other substances. These were, above all, cannabis (77% of users) and/or alcohol (68%). Then came amphetamine (19%), "acids" or LSD (18%), cocaine (17%), heroin (4%) and psychotropic substances (4%). Other products (8%) are marginal: ecstasy in tablets or in powder, ketamine, medicines used for other than their intended purpose, psilocybin mushrooms. Users over thirty years of age are more often users of heroin, cocaine, medicines or amphetamine but are not so often multiple users as the younger respondents.

# Collections mainly carried out in the clubbing/party context

Half the collections (49%) were made in the techno party context (free parties, raves and techno parties events), one third of collections were made in clubbing and party contexts (private parties, clubs, festivals and bars) and the rest in other contexts (street, town, apartment, squat, treatment facilities).

### The average price of ecstasy is falling

Since 2001 and in the context of the SINTES collections, a fall in the price of tablets sold as ecstasy has been observed, which may be due to increased availability of this substance in the market. The same trend can be observed for capsules claiming to contain MDMA (ecstasy) powder but they remain, on average, more expensive than tablets.

Figure 4: Average prices of tablets and capsules claiming to contain MDMA (ecstasy). Social health collections from 1999 to 30 June 2002



Source: OFDT, SINTES 2003

*Trends No. 32 September 2003* 

# **Regarding the methods applied in SINTES: constraints and outlook**

The purpose of SINTES is to concentrate knowledge of the nature and quantities of synthetic drugs available in France (especially ecstasy) and to identify new or dangerous products in order to provide information to the authorities, professionals and the general public. Given the illicit nature of the products and their use, it is hardly to be expected that traditional methods of enquiry can be used (surveys, sampling, surveys of the general public). SINTES is therefore based on unusual methodologies, able to gather, despite the constraints, highly representative information regarding the actual availability of party drugs in France. A new development in the information system was the introduction of a new contextual questionnaire in 2002. This sets out three main lines of collection strategy: most common products sold as ecstasy, new products and products that have caused health problems. This should improve the reliability of the collected information.

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