Trends No. 35

#### Review of the latest research

OFDT – OBSERVATOIRE FRANÇAIS DES DROGUES ET DES TOXICOMANIES [French Monitoring Centre for Drugs and Drug Addictions]

INSERM – INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE [National institute for health and medical research]

# Psychoactive substances amongst middle school and secondary school pupils: use in 2003 and trends over the past ten years

This paper presents the first results of the French part of the ESPAD 2003 survey (European School Survey Project on Alcohol and Other Drugs) and concerns the use of psychoactive substances by young 12-18 year-old middle school and secondary school pupils.

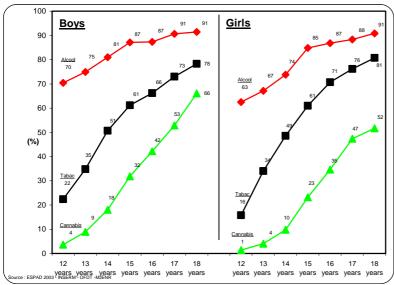
The quadrennial ESPAD survey, which has been carried out in France since 1999, fits into an ongoing OFDT observation device whose aim, since 1997, has been to study uses, attitudes and opinions in relation to drugs. ESPAD is carried out under the scientific responsibility of the INSERM "Adolescent health" team (Marie Choquet) and the ODFT "General population surveys" unit (François Beck), in partnership with the *Ministère de la Jeunesse, de l'Éducation nationale et de la Recherche* [Ministry of Youth, National Education and Research] (MJENR).

In addition to the level of the various uses, it is possible to study, over a period of ten years, the changes in the uses of pupils at secondary level, thanks to the previous national surveys: ESPAD 1999 and INSERM 1993.

## I – Lifetime prevalence

This indicates the fact of having already used a substance. It combines, firstly, pupils who may simply have had a glass of alcohol, or a cigarette or some cannabis or another psychoactive substance without repeating this experience and, secondly, adolescents who use drugs more regularly. The terms "Experimentation" or "Lifetime prevalence" are sometimes also used to indicate use during a person's life.





Source: ESPAD 2003 - INSERM-OFDT-MJENR

**Tobacco and alcohol are the substances experimented with most often by 12-18 year-olds.** Although the lifetime prevalence increases with age for both substances, their increase during adolescence is different. Thus, experimentation with alcohol, which is already high at the age of 12, increases slowly until 16 and then stabilises at around 90% for both boys and girls. As for tobacco use, this increases throughout adolescence.

However old the pupils are, the lifetime prevalence is always higher for alcohol than for tobacco, the difference being much greater at the age of 12 than at 18.

**Experimentation with cannabis, the most widely used illicit substance, increases rapidly between the ages of 12 and 18.** The lifetime prevalence of cannabis offers similarities with that of tobacco although at lower level of frequency. Very low between the ages of 12 and 13, it increases markedly from 14 and affects half of girls and two-thirds of boys at 18.

Taking tranquillisers or sleeping pills is often done within the context of a prescription. This is mainly a female behaviour, except at the ages of 12 and 13, where the difference between the sexes is small. Taking these substances, with or without a prescription, also clearly increases with age, particularly for girls.

# Lifetime prevalence with tranquillisers or sleeping pills, by age and gender

(%)		12-13	14-15	16-17
		years	years	years
On prescription	Boys	12,3	14,1	15,1
	Girls	11,4	17,2	21,2
On prescription	Boys	6,4	9,0	10,3
	Girls	5,2	12,1	15,2
TOTAL*	Boys	14,5	17,6	18,8
	Girls	13,2	20,7	26,3

Source: ESPAD 2003 - INSERM-OFDT-MJENR Reading: 12.3% of boys aged 12-13 have already taken tranquillisers or sleeping pills on

<sup>(\*)</sup> The total is not the sum of the two, because some pupils were able to respond positively to both

However, only 2% of boys and 3% of girls have already taken such psychotropic medicines on prescription for at least 3 weeks and 1% of boys and girls have taken them without prescription at least ten times during their life.

**Illicit substances other than cannabis are not used very much.** The lifetime prevalences are generally very low: the percentages are always lower than 5%, except for inhalants (glues, solvents) and magic mushrooms in boys aged 16-17.

These uses increase relatively little with age and the vast majority of those who have tried one of these substances do not repeat the experience.

# Girls less tempted than boys

Sex-ratios (1) of lifetime prevalences

	12-13 years	14-15 years	16-17 years			
Alcohool	1,12	1,06	1,02			
Tobacco	1,15	1,02	0,95			
Cannabis	2,31	1,51	1,16			
Source · ESPAD 2003 - INSERM-OFDT-MIENR						

Generally speaking, there are more boys than girls who have used psychoactive substances during their life. The relative precocity of boys gradually shades off, with the difference between the sexes reducing throughout adolescence and being cancelled out for alcohol and even reversed for tobacco. Amongst the youngest children, the sex-ratios are always greater than 1, particularly for cannabis.

(1): the sex-ratio is the ratio of the percentage of boys over the percentage of girls. A sex-ratio greater than 1 therefore indicates that there are more boys than girls involved.

# 12-13 year-olds, in particular experimenters with licit substances

Among the youngest pupils questioned, use of psychoactive products appears relatively low with the exception, however, of experimentation with alcohol.

Thus, at the age of 12, more than 3 out of 5 pupils say that they have already had an alcoholic drink.

Furthermore, although more than 20% of pupils have already experimented with tobacco, the great majority of 12-13 year-olds say that they do not currently smoke.

Experimentation with cannabis affects only 4% of boys and 1% of girls at the age of 12 and 9% of boys and 4% of girls at 13.

#### Few abstainers

Here, the term "abstainers" refers to those pupils who have never tried tobacco or alcohol or cannabis. Between the ages of 12 and 18, 12% of boys and 15% of girls are "abstainers".

These proportions fall particularly between the ages of 12 and 15, decreasing by 25% to 8% for boys and by 34% to 10% for girls. After the age of 15, they remain stable for both boys and girls (8% at 16, 5% at 17 and 18).

# Other substances (%)

Other substances (%)		12-13 years	14-15 years	16-17 years
Inhalants	Boys	8,6	11,5	12,0
	Girls	6.7	10,2	9,7
Amphétamines	Boys	1,5	2,7	2,9
	Girls	0,5	1,7	1,9
LSD/acid*	Boys	-	0,9	1,6
	Girls	-	0,5	0,6
Cocain*	Boys	-	3,3	2,6
	Girls	-	2,4	2,0
Ecstasy*	Boys	-	2,8	4,4
	Girls	-	2,2	2,8
Hallucinogenic mushroioms*	Boys	-	3,7	6,8
	Girls	-	1,1	2,5

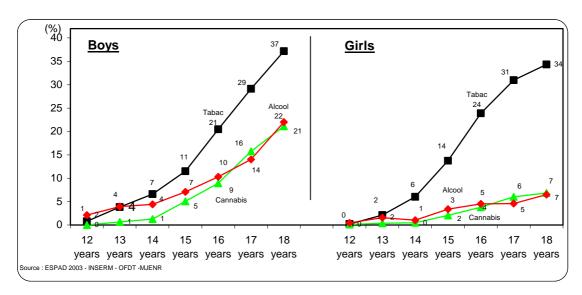
Source: ESPAD 2003 - INSERM-OFDT-MJENR

(\*) Data not available for the youngest children.
Reading: 8.6% of boys aged 12 and 13 have experimented with an inhalant.

# II - Regular use

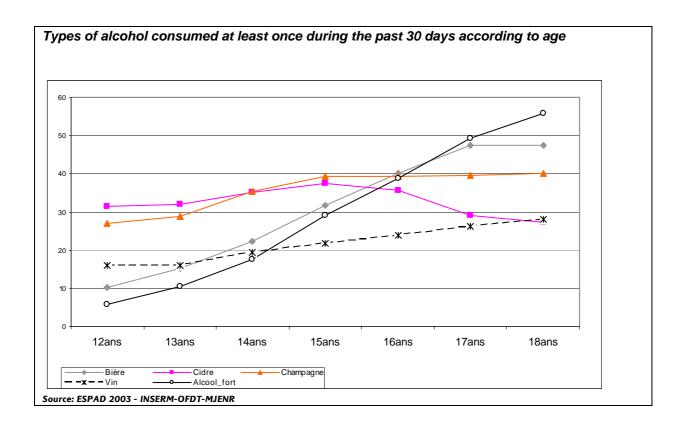
Here, regular use is taken to mean more than 10 times per month for alcohol and cannabis and more than one cigarette per day (daily use) for tobacco.

# Regular use of tobacco, alcohol and cannabis, by age and by gender



Regular tobacco and alcohol use is rare before the age of 14, and then increases with age. Daily smoking is however clearly ahead of regular alcohol use. The proportion of daily tobacco smokers increases from 7% to 37% between the ages of 14 and 18 in boys and from 6% to 34% in girls. The regular use of alcohol, even though it increases strongly in boys (from 4% at 14 to 22% at 18) and in girls (from 1% to 7%), remains well below that of tobacco.

Regular cannabis use catches up with alcohol use with age. Exceptional before the age of 15, regular cannabis use affects less than 1% of pupils at this stage. It increases markedly after this age for boys (from 1% to 21% between 14 and 18) and, to a lesser extent, for girls (from 1% to 7%). From the age of 16, regular cannabis use reaches the level of regular alcohol use.



The types of alcohol consumed during the past thirty days vary according to age. Between the ages of 12 and 15, cider and champagne are the alcoholic drinks consumed most often. Then, between the ages of 15 and 18, their use stabilises or even decreases and is gradually replaced by the use of beer and spirits. Thus, at 16, spirits come at the top of the list for boys, ahead of beer and the other drinks (champagne, wine, cider). For girls, the ranking is slightly different: although spirits are also the most widely consumed alcohol drinks, champagne is ahead of beer.

Wine stands out clearly from the other alcoholic drinks: its consumption increases very slowly and remains relatively low throughout adolescence.

#### Drunkenness: more male

Drunkenness (%)		12-13	14-15	16-17			
		years	years	years			
during a person's life	Boys	12,0	29,3	51,1			
	Girls	6,3	24,3	47,0			
Regular	Boys	0,3	1,2	5,1			
	Girls	0.1	0.3	1 3			

Source: ESPAD 2003 - INSERM-OFDT-WENR Reading:12.0% of boys aged 12-13 say that they have been drunk at least once in their life.

The lifetime prevalence of drunkenness appears to be a more male behaviour. Between the ages of 12 and 13, twice as many boys as girls say that they have been drunk at least once during their life. But this male predominance then decreases during adolescence. Furthermore, drunkenness increases strongly with age in both boys and girls.

Regular drunkenness, which consists of declaring at least 10 episodes of drunkenness during the year, is rare. Almost nil before the age of 16, it remains a largely male behaviour at the age of 16-17 and affects only one boy in twenty.

# Regular use, a more male behaviour

Regular use emphasises the differences between the sexes more than lifetime prevalence, with a strong male predominance. Only daily smoking tends to be more important among girls from the age of 14, with the difference not being statistically significant.

Sex-ratios of regular uses

	12-13 years	14-15 years	16-17 years
Tobaccob	2,00	0,92	0,90
Alcohol	2,99	2,61	2,67
Cannabis	1,36	1,51	1,52

Source : ESPAD 2003 - INSERM-OFDT-MJENR

# The proportion of regular users among lifetime users varies according to:

Substance: this proportion of regular users is higher for tobacco than for cannabis and alcohol;

Sex: it is higher for boys than for girls;

Age: the proportion of regular users, almost nil at the age of 12, rises, between the ages of 13 and 18 in boys, from 11% to 47% for tobacco, from 5% to 32% for cannabis and from 5% to 24% for alcohol; in girls, it rises from 6% to 43% for tobacco, from 9% to 13% for cannabis and from 2% to 7% for alcohol.

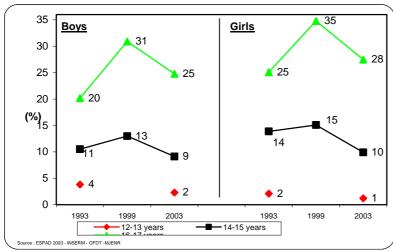
## III - Trends in use over 10 years

Although, for tobacco and cannabis, experimentation has increased in 10 years, regular use has seen more contrasting changes, which vary according to substance, sex or age.

For alcohol use, the questions in the 1993 surveys are not comparable with those in 1999 and 2003, therefore the evolution is only studied between 1999 and 2003.

# 1 - Tobacco

# Change in daily tobacco use since 1993



[chart]

For tobacco, one can see, between 1993 and 1999, an increase both in experimentation and in daily use and then a decrease between 1999 and 2003. In the space of 10 years, daily smoking has decreased among pupils aged under 15, particularly in girls, whereas it has increased among 16-17 year-olds, particularly in boys, but the recent trend is downwards.

# Change in the lifetime prevalence of tobacco

		12-13 years	14-15 years	16-17 years
Boys 1	993	26,4	44,2	56,7
1	999		65,4	77,7
2	003	28,6	56,0	69,7
Girls 1	993	22,8	50,4	62,3
1	999		68,5	80,6
2	003	24,9	55,1	73,5
2 Girls 1	993 999	22,8	56,0 50,4 68,5	69,7 62,3 80,6

Sources: INSERM 1993; ESPAD 1999 and 2003 - INSERM-OFDT-MJENR

#### 2 - Alcohol

Whatever the gender and age, lifetime use and regular use have remained stable between 1999 and 2003

Change in alcohol use (lifetime/regular) since 1999

		14-15 years		16-17 years	
Boys	1999	Lifetime prevalence 83,1	Regular use 5,8	Lifetime prevalence 87,0	Regular use 12,5
	2003	84,1	5,8	89,0	12,2
Girls	1999	79,3	3,2	86,7	5,6
	2003	79,3	2,2	87,6	4,6

Sources: INSERM 1993; ESPAD 1999 and 2003 - INSERM-OFDT-MJENR

# 3 - Cannabis

As regards cannabis, in order to enable a comparison with 1993, the notion used in one of repeated use (at least ten uses during the year) and not of regular use.

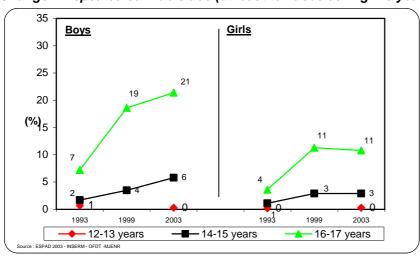
For cannabis, experimentation and repeated use have increased since 1993, for both girls and boys. These increases are significant since the rates of experimentation and repeated use have at least doubled for all the age brackets (with the exception of repeated use among 12-13 year-olds which remains very rare). Thus, in ten years, repeated use amongst boys aged 14-15 has risen from 1.7% to 5.8% and amongst 16-17 year-olds from 7.2% to 21.4%. These increases were particularly strong between 1993 and 1999, but have persisted subsequently in boys.

# Change in lifetime prevalence of cannabis

		12-13	14-15	16-17
		years	years	years
Boys	1993	3,0	8,1	20,6
	1999		19,6	42,7
	1999		19,0	42,7
	2003	6,3	24,9	47,6
Girls	1993	1,2	6,0	16,0
	1999		13,5	34,9
	2003	2,7	16,5	41
l				

Sources: INSERM 1993: ESPAD 1999 and 2003 - INSERM-OFDT-MJENR

# Change in repeated cannabis use (at least ten uses during the year) since 1993



Sources: INSERM 1993; ESPAD 1999 and 2003 - INSERM-OFDT-MJENR

Before the end of the year, the complete ESPAD 2003 survey report should provide an in-depth view of the various questions arising in connection with the use of psychoactive substances in adolescence, and put these into perspective with other data from recent surveys: ESCAPAD 2003 carried out among young people aged 17-18 attending their *Journée d'appel de préparation à la Défense* [Defence Roll Call Day] (JAPD) and HBSC (Health Behaviour in School-age Children) 2002 carried out in middle schools among 11-, 13- and 15-year-olds whose questionnaire focuses in part on the use of psychoactive substances.

## **Methodological indicators**

This cross-sectional school survey was carried out in the first half of 2003 in around thirty European countries on the basis of a common questionnaire focusing on uses, attitudes and opinions in relation to drugs. This project, on the initiative of the Swedish council for information on alcohol and other drugs (CAN), is supported by the Council of Europe (Pompidou Group). Repeated every 4 years at the same time, ESPAD monitors drug use trends in France and at the European level.

In 2003, as in 1999, the fieldwork took place from March to May. The sample was stratified according to the following criteria: type of establishment (middle school, vocational school, or general and technical school), whether it belongs to a ZEP [zone d'environnement protégé – environmentally protected zone] and location (in a rural or urban district). The draw, carried out by the DEP (Direction de l'évaluation et de la prospective [Department of Evaluation and Futurology) of the Ministère de l'Éducation nationale [Ministry of National Education], was done in two stages. In the first stage, 450

establishments were chosen, each with a probability of being drawn proportionate to its number of pupils. In the second, two classes were selected at random in each of these establishments. This year, the pupils in classes 6 and 5 were included in the survey which means that the drug use of pupils aged 12 and 13 can be studied. In total, 16833 pupils responded individually to the self-administered questionnaire in class, in the presence of an adult referee in the private sector and a health professional (school nurse or doctor) in the public sector. This person was responsible for presenting the survey to them and answering any questions they may have had. It involved stated uses. The participation of the classes was 85.8% (this rate is above 90% in the majority of the regional education authorities except in those of Nancy and Toulouse) and 90.1% of the pupils responded, so that, in total, the pupil participation level reached 78.2% of the estimated initial sample.

The pupils questioned are representative of young people living in France for the ages at which the school attendance rate is very high (98% between the ages of 13 and 15 and 92% at 16). As the school attendance rate in secondary school decreases after the age of 16 and falls to 82% at 17, then to 75% at 18, the representativeness of young people of this age is not completely guaranteed, since some young people have already left secondary school, whether to go into higher education, into apprenticeship or to enter professional life. Moreover, the frequently absent pupils, who are known to use drugs more often than the others, are under-represented. However, those absent on the day of the survey and the pupil or parent refusals are still too few in number (9.8% of the sample for these three reasons) to call the results into question. For the results presented by age bracket, these involve the average of the prevalences for the two ages in question.

To understand the trends during the 1990s, the points of reference are the two previous national surveys, ESPAD 99 (N = 11870) and the survey carried out in 1993 by Unit 472 of INSERM (N = 12391) on the health and behaviour of adolescents.

#### For further information

BECK (F.), LEGLEYE (S.), PERETTI-WATEL (P.), *Alcool, tabac, cannabis et autres drogues illicites parmi les élèves de collège et de lycée* [Alcohol, tobacco, cannabis and other illicit drugs among middle and secondary school pupils]: *ESPAD 1999 France*, Volume II, 2002, OFDT, Paris.

BECK (F.), LEGLEYE (S.), *Drogues et adolescence. Usage de drogues et contextes d'usage entre 17 et 19 ans, évolutions récentes* [Drugs and adolescence. Drugs use and contexts of use between the ages of 17 and 19]; *ESCAPAD 2002*, 2003, OFDT, Paris.

CHOQUET (M.), LEDOUX (S.), *Adolescents, enquête nationale* [Adolescents, national survey], 1994, INSERM, Paris.

CHOQUET (M.), LEDOUX (S.), HASSLER (C.), *Alcool, tabac, cannabis et autres drogues illicites parmi les élèves de collège et de lycée* [Alcohol, tobacco, cannabis and other illicit drugs among middle and secondary school pupils]: *ESPAD 1999 France*, Volume I, 2002, OFDT-INSERM, Paris.

HIBELL (B.), ANDERSSON (B.), AHLSTRÖM (S.), BALAKIREVA (O.), BJARNASSON (T.), KOKKEVI (A.), MORGAN (M.), *The ESPAD report, Alcohol and Other Drug Use Among Students in 30 European Countries*, 2001, CAN, Stockholm.

HIBELL (B.), ANDERSSON (B.), BJARNASSON (T.), KOKKEVI (A.), MORGAN (M.), NARUSK (A.), The 1995 ESPAD Report, Alcohol and Other Drug Use Among Students in 26 European countries, 1997, CAN, Stockholm.

Marie Choquet, François Beck, Christine Hassler, Stanislas Spilka, Delphine Morin et Stéphane Legleye