

ÁREA CLÍNICA

Alcohol drinking and alcohol-related problems in France

Alcohol y problemas relacionados con el alcohol en Francia

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RESUMEN: Objetivos: Este artículo describe las pautas de consumo de alcohol, prevalencia de consumo de alcohol, dependencia y mortalidad relacionada con el consumo de alcohol en Francia. Se analiza la evolución del consumo de alcohol en Francia y en los países europeos, así como las diferencias entre sexos en relación con el consumo, dependencia y mortalidad relacionada con el consumo de alcohol.

Material y métodos: La Mission interministérielle de lutte contre la drogue et la toxicomanie (Mildt), la Caisse nationale d'assurance maladie des travailleurs salariés (Cnamts) y el Institut national de prévention et d'éducation pour la santé (Inpes [ex CFES], Comité français d'éducation pour la santé), los cuales son los agentes clave en el desarrollo de las políticas públicas dirigidas a la prevención y tratamiento de los problemas relacionados con el consumo de alcohol, han solicitado información al INSERM a través de la consulta colectiva mediante expertos. Este grupo de expertos ha facilitado información científica validada acerca de las pautas de consumo de alcohol, los cambios a lo largo del tiempo, las consecuencias sociales asociadas al consumo excesivo de alcohol, los factores de riesgo de abuso y dependencia, y problemas relacionados con el consumo de alcohol.

Resultados: El consumo de alcohol en Francia ha descendido un 40% en 40 años, mientras que el consumo de vino ha descendido un 40% en tan sólo

20 años. Sin embargo, el consumo de vino es aún predominante, especialmente en los mayores de 65 años, entre los cuales el 65% consume vino diariamente. Las pautas de consumo de alcohol son muy diferentes entre los jóvenes. Éstos consumen preferentemente cerveza y licores, principalmente los fines de semana, y en un contexto de celebración. Frecuentemente, mezclan bebidas y se emborrachan. Se estima que más de 2 millones de franceses poseen síntomas de dependencia al alcohol, y al menos el 40% de ellos posee otro trastorno mental asociado. La búsqueda de nuevas sensaciones, la edad temprana al inicio del consumo y la falta de reconocimiento de los efectos del alcohol en la persona, son los 3 factores que predicen futuras situaciones de abuso y dependencia al alcohol. El alcohol es el responsable de unas 2.700 muertes y de unos 24.000 accidentados en las carreteras cada año.

Conclusiones: Aunque prácticamente toda la población de Francia consume algo de alcohol, las pautas de su consumo difieren marcadamente entre los jóvenes, los cuales consumen cerveza y licores durante los fines de semana, y la población mayor de 65 años, que consumen preferentemente vino y lo hacen todos los días. Estas pautas de consumo de alcohol difieren entre sexos, tanto en los jóvenes como entre los adultos. Por ello, es importante considerar todos estos diversos factores a la hora de diseñar las estrategias preventivas adecuadas.

PALABRAS CLAVE: Alcohol. Francia. Expertos. INSERM. ESPAD. OFDT. MILDT.

ABSTRACT: Objective: This paper describes current alcohol drinking patterns, prevalence of alcohol use, dependency and mortality related to alco-

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hol in France. Evolution of alcohol consumption in France and Europe is discussed, as well as differences between males and females about alcohol consumption, morbidity and mortality related to alcohol use.

Material and methods: The Mission interministérielle de lutte contre la drogue et la toxicomanie (Mildt), the Caisse nationale d'assurance maladie des travailleurs salariés (Cnamts) and the Institut national de prévention et d'éducation pour la santé (Inpes [ex CFES], Comité français d'éducation pour la santé), who are the key players in public policies for the prevention and management of alcohol-related problems, wanted to question Inserm via the collective expertise procedure. This expertise provided validated scientific information relating to alcohol-related consumption habits and how these had changed over time, the social damages associated with excessive consumption, the risk factors for abuse and dependency and the related management problems.

Results: In France, global alcohol consumption has fallen by almost 40% in forty years and the consumption of wine has also decreased by 40%, but over a period of twenty years. Wine consumption is nevertheless largely predominant since 65% of people over the age of 65 drink wine on a daily basis. Consumption habits are very different in young people. They drink beer and spirits more so than wine, and tend to do so at weekends, in a celebratory context. They frequently mix their drinks and become inebriated. Over 2 million people in France are estimated to have symptoms of dependency and almost 40% of these present with another mental disorder. Sensation-seeking, the early onset of consumption and resistance to the subjective effects of alcohol are three factors for predicting abuse and dependency. Alcohol is related with around 2700 deaths and 24 000 injuries on the road each year.

Conclusions: Although almost all French people consume alcohol, consumption habits vary considerably between young people who mainly consume alcoholic drinks other than wine at weekends, and people over 65 years of age who drink mostly wine on a daily basis. These consumer habits also differ between girls and boys, and between adult men and women. It is therefore important to consider these various factors in order to define more appropriate prevention strategies.

KEY WORDS: Alcohol drinking. France. Collective expertise. INSERM. ESPAD. OFDT. MILDt.

Global alcohol consumption has fallen from almost 18 litres of pure alcohol per year and per inhabitant in 1960 to almost 11 litres in 1999

Two major sources of data allow alcohol consumption to be estimated on an individual and collective level: market studies and consumer surveys^{1,2}.

Market studies allow global alcohol consumption to be estimated per year and per inhabitant (15 years of age and above) based on the production, importing and exporting of alcohol. Imports are added to the quantities of alcohol produced per country, and exports are deducted. After weighting according to the size of the population, a mean annual consumption rate per inhabitant is obtained, expressed in litres of pure alcohol.

This is a mean value that does not distinguish between sex, age bracket, socio-professional category or other sociodemographic criteria. Furthermore, even if this is of little relevance to France, it appears that quite a considerable proportion of alcohol production is not taken into account (not declared and, therefore, not registered). This is particularly evident in the Scandinavian countries and Canada where it can account for up to 30% of alcohol production.

In France (Table 1), following an increase between 1951 and 1957, global alcohol consumption fell by almost 40% between 1960 (17.7 litres of pure alcohol/year/inhabitant) and 2002 (10.3 litres). In twenty years, wine consumption has fallen by almost 40% and beer consumption by 15%. The consumption of spirits has also declined (with considerable fluctuations over time). This fall in global alcohol consumption is therefore due essentially to a substantial decrease in the consumption of wine.

In 1999, France ranked in third position behind Luxembourg, Ireland and in front of Portugal. Wine con-

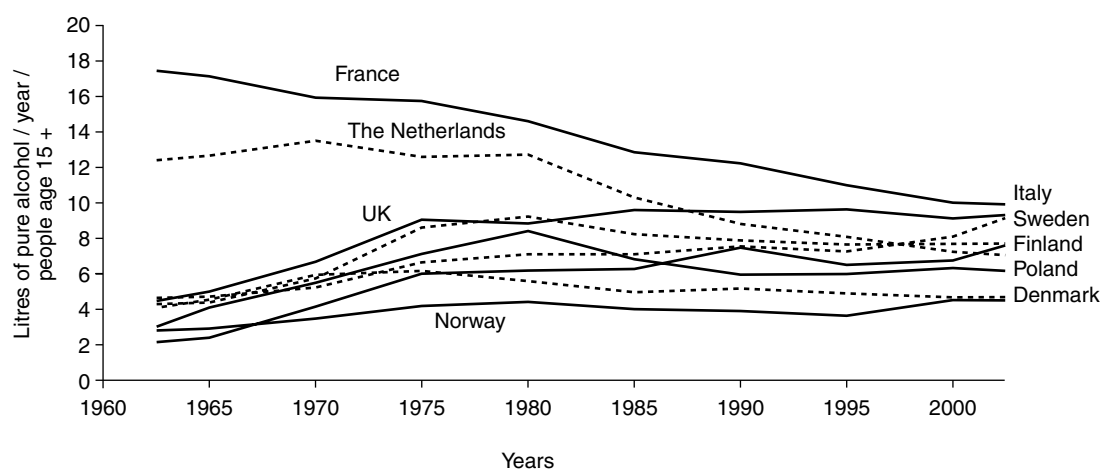
Table 1. Alcohol consumption in France (World Drink Trends, 2004)³

	Wine (litres)	Beer (litres)	Spirits (litres of pure alcohol)	Global (litres of pure alcohol)
1960	126.1	37.20	2.10	17.7
1970	109.1	41.25	2.30	16.2
1980	91.0	44.31	2.52	14.9
1990	72.7	41.50	2.49	12.6
2000	55.9	36.20	2.41	10.4
2001	56.9	36.10	2.41	10.5
2002	56.0	34.80	2.40	10.3

Table 2. Alcohol consumption* in France and Europe (World Drink Trends, 2004)³

	1996	1997	1998	1999	2000	2001	2002
Luxemburg	11.6	11.4	13.3	12.9	13.2	12.4	11.9
Ireland	9.4	9.7	9.7	9.6	10.7	10.8	10.8
Portugal	11.6	11.3	11.0	10.6	10.3	10.3	9.7
France	11.2	10.9	10.8	10.7	10.4	10.5	10.3

*In litres of pure alcohol per year and per inhabitant.

**Figure 1.** Evolution of global alcohol consumption in Europe for 40 years.

sumption is on the decline in Southern Europe but is increasing very markedly in Northern Europe. The differences in alcohol consumption between the Latin countries, which are traditionally wine producers and consumers, and the Anglo-Saxon and Scandinavian countries persist, but are increasingly less noticeable (Table 2, Figure 1).

The countries traditionally recognised for their beer and spirits consumption have also witnessed a very rapid growth in their wine consumption whereas wine-consuming countries have registered an increase in beer consumption. Beer is a newcomer to Mediterranean countries and is mainly consumed by young people. Alcohol consumption in Europe is thus becoming more evenly distributed. However, the increase in beer consumption does not offset the decrease in wine consumption, hence global alcohol consumption is declining.

Some countries (Table 3) around the world have witnessed an increase in their global alcohol consumption (Brazil, Paraguay, Turkey and Mexico in particular), whilst others have noted a significant decrease (United States, Chile, Argentina and Algeria in particular).

Over 80% of all the alcoholic beverages exported come from European countries. France remains the leading exporter of alcohol (25.9% of the world's trade) whilst the United States is by far the leading importer.

Consumption surveys highlight indicators that enable homogeneous groups of the population to be followed over time, and allow changes in attitude towards alcohol to be studied according to sex, age and other sociobiographical criteria.

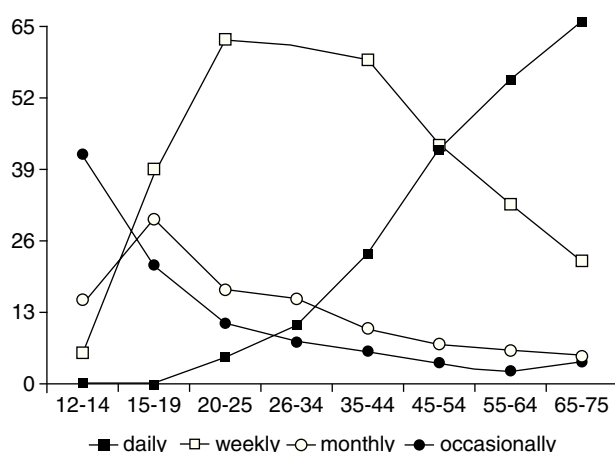
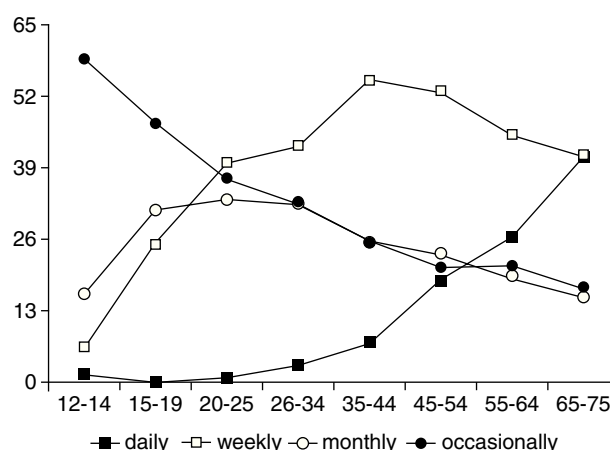
From 20 years of age, more than one French person in two consumes alcohol at least once a week

In France, the Baromètre santé 2000⁵ estimated the daily, weekly, monthly and more occasional consumption habits of the French population between 12 and 75 years of age.

Among these French people, 3.5% declared that they had never drunk any alcohol in their life. The proportion of abstainers decreases as a function of age (17% at 12-14 years and almost 2% at 45-54 years).

Table 3. Changes in the consumption of wine, beer and spirits over the last twenty years (World Drink Trends, 2000)⁴

Wine (%)		Beer (%)		Spirits (%)	
Spain	-47.9	Belgium	-25.7	Italy	-73.7
Italy	-44.6	United Kingdom	-16.3	Sweden	-63.5
France	-38.4	Denmark	-16.2	Norway	-52.9
Portugal	-24.7	France	-14.9	Iceland	-50.7
Greece	-21.6	The Netherlands	-12.6	The Netherlands	-38.2
The Netherlands	+44.7	Norway	+6.1	Spain	-25.0
United Kingdom	+101.7	Sweden	+25.6	Finland	-24.5
Denmark	+113.3	Finland	+39.5	Denmark	-24.3
Norway	+115.4	Greece	+53.2	United Kingdom	-15.7
Finland	+266.9	Italy	+62.3	France	-4.8
Ireland	+703.9	Portugal	+69.7	Portugal	+66.7

**Figure 2.** Alcohol consumption among males over the last twelve months according to frequency of intake and age (Baromètre santé 2000, CFES)⁵.**Figure 3.** Alcohol consumption among females over the last twelve months according to frequency of intake and age (Baromètre santé 2000, CFES)⁵.

Women abstain more frequently than men (Figures 2 and 3).

Amongst the 12-75 year-olds, almost 20% admit to drinking alcohol every day: 28% of men and 11% of women. This daily consumption pattern starts to appear in young people from the age of 20-25 years, increasing with age and reaching a peak between the ages of 65 and 75 and affecting 65% of men and 33% of women.

Wine is the most widely consumed alcoholic drink. 17.5% of the 12-75 year-olds consume it on a daily basis: 25% of men and 10% of women. This increases with age: 62% of men between 65 and 75 years of age, and 32% of women in the same age bracket.

Over the last twelve months, 90% of the 12-75 year-olds admitted to having drunk at least one alcoholic drink. The average drink units the day before the interview (Figure 4) are more likely among men than women, for lifetime.

Inebriation is most common place amongst young people (Figure 5). The difference between the sexes is most apparent in the 20-25 age bracket: 40% of men between the ages of 20 and 25 repeatedly become drunk (more than 3 times per year) compared with 24.5% of women in this particular age bracket.

In young people, repeated bouts of inebriation are often associated with regular alcohol or cannabis consumption

Based on surveys conducted in French schools between 1993 and 1999⁶⁻⁸ (Espad, survey conducted by means of an anonymous questionnaire on a typical population of schoolchildren), experimenting with alcohol has slightly increased in France, rising from 81% to 86% in 16 year-old boys and from 79% to 85% in

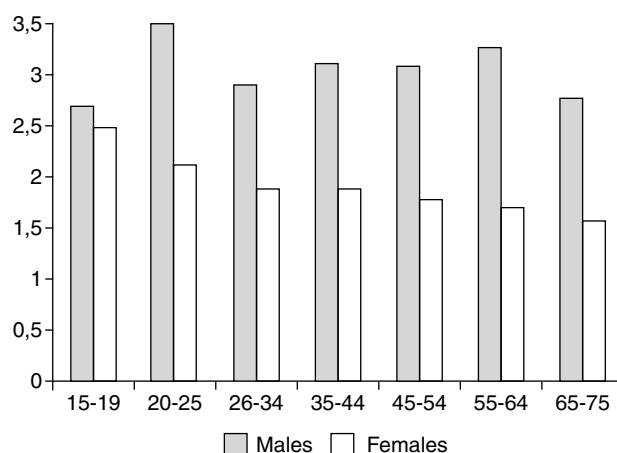


Figure 4. Average drink units the day before the interview according to age and sex (Baromètre santé 2000, CFES)⁵.

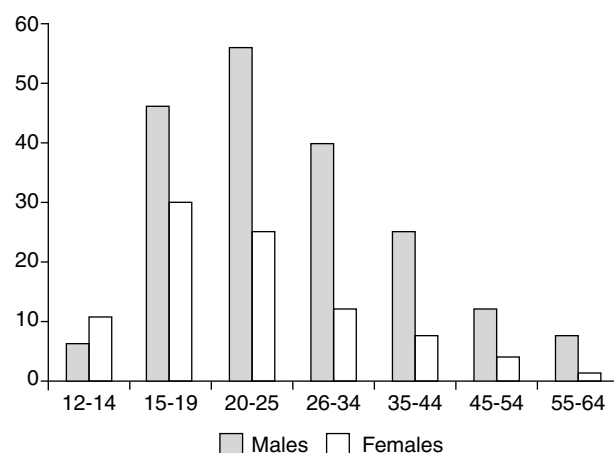


Figure 5. Average number of cases of inebriation over the last twelve months per sex and per age (Baromètre santé 2000, CFES)⁵.

girls of the same age. Repeated usage (at least ten uses in the course of one month) does not appear to have increased. As regards inebriation, the number of young people who, between 1993 and 1999, admitted to having experienced at least ten episodes of drunkenness over a 12-month period has remained stable in the 14-16 year-old bracket (5% in the boys), but has slightly fallen amongst the 17 and 18 year-olds: from 14% to 10% in boys of 18 and from 3% to 2% in girls of the same age.

In 1999 (Table 4), the proportion of French pupils who consumed alcohol during the previous twelve months was below the average figure obtained for all European countries (77% versus 83%). The same applied to the proportion of French pupils who had been inebriated in the last twelve months (36% versus 52%)(Table 5).

The French survey⁹, Escapad («health and consumption» survey conducted by means of an anonymous questionnaire completed during a «Journée d'Appel de Préparation à la Défense» (defence preparation seminar), shows that 17 year-old girls had their

first taste of alcohol at 13.6 years, i.e. on average 6 months later than boys (13.1 years). Alcohol preceded smoking. The first experience of inebriation occurred approximately two years after initial alcohol consumption, regardless of age and sex. Girls declared having been inebriated for the first time on average 5 months after boys of their own age.

Behaviour differs between the sexes. The prevalence of smoking, alcohol consumption and inebriation appears to be linked to the early onset of experimentation. As regards concomitant usage, cannabis and alcohol are mostly linked.

According to longitudinal studies conducted in the United States and Europe focusing on adolescent alcohol consumption, the first risk factor for consumption at the end of adolescence or the onset of adulthood is the early onset of consumption. The onset of alcohol consumption at 12-14 years of age is a predictive factor for alcohol consumption at 16 or even alcohol abuse, whereas the onset of alcohol consumption at 16 is marginally predictive for adult consumption. This applies to both boys and girls.

Table 4. The frequency of alcohol consumption over the last thirty days in 17 year-old girls and boys between 17 and 19 years of age (Escapad 2000, OFDT)⁹

	Consumption			
	None (%)	Once or twice (%)	3-9 times (%)	10 and more times (%)
Girls, 17 years of age	22.6	42.7	29.1	5.5
Boys, 17 years of age	19.0	31.6	33.2	16.0
Boys, 18 years of age	20.6	28.6	33.2	17.5
Boys, 19 years of age	17.2	26.3	34.1	22.3

One-third of young people between 16 and 17 years of age has experimented with alcohol, smoking and cannabis. There is a gradual shift towards experimenting with one or even two substances, followed by all three substances.

One young person in five regularly uses one of these substances. Polyconsumption increases appreciably with age, especially in the case of 19 year-old boys, 14% of whom take several substances on a regular basis.

Outings and evening functions are a fundamental aspect of a young person's life, and often lead to alcohol consumption. However, being a consumer may entice a young person to go to functions. According to Escapad, young people who frequent «techno» events account for less than 1% of the study population. Consequently, most of the alcohol consumers, smokers and people who become inebriated are recruited from amongst youngsters who have never been to a «techno» event.

The correlation (measured by the *odds ratio*) between the regular consumption of cannabis and regular alcohol consumption or smoking is high ($3 < OR < 5$) for boys and even higher ($OR > 5$) for girls. For both males and females, the link between repeated inebriation and regular alcohol or cannabis consumption is very marked. It is, however, more marked for girls than for boys. Overall, the risk of regular cannabis consumption is higher amongst female smokers than male smokers and amongst female drinkers than male drinkers. The risk of having been inebriated several times over the last thirty days is higher in girls who consume alcohol on a regular basis or take cannabis than amongst boys with similar habits.

Certain sociodemographic and educational factors are more closely linked with a high alcohol consumption. The same applies to absenteeism from school. The pupil's behaviour at school (absenteeism, school results and liking for school) is more closely linked with alcohol consumption than familial characteristics («intact», single-parent, restructured family), regard-

less of the type of school establishment (priority education area, public, private, town or rural location). Violent, delinquent behaviour (major violence, theft and disputes), running away and attempted suicide are associated with regular alcohol consumption. Consumption is not linked more frequently with major violence than it is with other problems such as attempted suicide or running away. The links between regular consumption and risky behaviour are always more noticeable for girls than for boys. Finally, those who do not practise any sport or who practise for more than eight hours per week are more likely to become regular consumers of alcohol than others.

Alcohol use disorders in France

The prevalence of alcohol abuse and dependency is estimated on the basis of studies conducted amongst the general population and for which the same methodological comments can be made as for the consumer studies: representative sample; concealed group; maintenance methods; nature of questions, risks of non-response that are added to the under-estimation of self-reported consumption. Comparative groups are often described but there are many biases in terms of selection, thus limiting extrapolation. According to the Baromètre santé 2000 data³, 8.6% of people in the 12 to 75 year-old bracket are or have been at risk of excessive consumption (according to the DETA questionnaire, the French version of the CAGE questionnaire): 13.3% of men and 4.1% of women. The highest prevalence is in the 45 to 54 age bracket. There is a link between the frequency of inebriation, smoking and cannabis. There was no change in dependency (according to DETA) between 1992, 1995 and 2000 for those over 20 years old.

According to a survey conducted among general practitioners¹⁰, 20% in adult outpatients (30% males and 11% females) are hazardous drinkers and 5% are dependent.

Table 5. Frequency of inebriation throughout life (Escapad 2000, OFDT)⁹

	Inebriation			
	None (%)	1 or 2 (%)	3 to 9 (%)	10 and over (%)
Girls, 17 years of age	50.5	31.3	13.6	4.6
Boys, 17 years of age	36.7	27.9	20.2	15.2
Boys, 18 years of age	34.6	25.6	20.7	19.1
Boys, 19 years of age	25.2	25.8	23.4	25.6

The prevalence of alcohol use disorders in hospital patients was studied in 1999 among 9 french regional military hospitals¹¹: the prevalence of alcohol disorders (according to DETA score ≥ 2) is 14.9%: 18.3% among males and 6.6% among females. The prevalence of DETA scores (from 2 to 4) is higher among the ages 46-55 and in psychiatric care units.

In the working environment, men drink twice as much alcohol as women

In France, several studies have been carried out in recent years to assess the prevalence of alcohol consumption in the working environment. First and foremost, it should be noted that the collection of objective and systematic data is ethically difficult within the scope of occupational medicine. Furthermore, it should also be noted that acceptable blood alcohol levels change over time – not least by current legislation for road users –which is 0.5 g/l at the present time (law dated 13 November 1996).

According to an Ipsos survey conducted in September 2001, 71% of those interviewed consume alcohol during business lunches/dinners, 35% consuming more alcohol than usual. Alcohol consumption in a professional context is evident in physically demanding professions such as building, farming and maintenance works, as well as in professions dealing with the general public.

In all cases and regardless of age, the average number of glasses consumed by men in a working environment is 1.5 to 2 times higher than that of women. According to the results of the Gazel cohort study [over 20 000 EDF-GDF (gas and electricity) employees], 18.3% of men admitted to drinking 3 to 4 glasses of alcohol every day and 12.3% to 5 glasses and more per day. The equivalent percentages in women are 3.5% and 1.2%, respectively.

Surveys carried out by teams of work doctors have also facilitated assessment of the number of people experiencing alcohol-related problems. In the iron and steel sector, doctors confirmed in 1983 that 10% of workers were excessive drinkers and 8% alcoholics.

Alcohol is involved three times more often in road-traffic accidents than in accidents in the workplace

Numerous studies have investigated the presence of alcohol in various types of accident in order to estab-

Table 6. Alcohol-related accidents in France (report by the High Committee for the alcohol-related investigation and information, 1985)¹²

Blood alcohol level > 0.5 g/l		
Men (%)	Women (%)	
60	31	Fights
40	11	Road-traffic accidents
28	14.5	Domestic accidents
12	2	Accidents in the workplace
5	1.5	Sport-related accident

lish any correlation between blood alcohol levels and the accident.

Although alcohol is associated with various types of road-traffic accidents, it also plays a major role in domestic accidents, accidents at work, in fights and in drownings, etc. In 1992 in the United States, alcohol was found to be involved in 50% of the road-traffic accidents and in fewer than 20% of accidents occurring in the work place.

In France, a multicentre study involving almost 5 000 accident victims admitted to 21 hospitals between October 1982 and March 1983 allowed the blood alcohol levels of the victims and two biological indicators, namely gamma-glutamyltransferase (GGT) and mean corpuscular volume (MCV), to be examined at the same time, confirming significant and chronic alcohol consumption. The results indicate that alcohol is very often involved in fights and road-traffic accidents (Table 6): 60% of men involved in fights have a blood alcohol level exceeding 0.50 g/l. Sporting accidents and accidents in the workplace represent the lowest incidences of elevated blood alcohol levels: 5% in men. In women, high blood alcohol levels are mainly evident in domestic accidents and fights.

Alcohol is responsible for approximately 2700 deaths per year on the road

In France at the present time, alcohol is involved in one-third of fatal road-traffic accidents, regardless of whether the driver is male or female. The total number of people killed on the road in one year is approximately 8 000 and the number injured, 160 000. Alcohol is linked with around 2 700 deaths and 24 000 injuries on the road each year. In 1970 and 1980, alcohol played a role in 40% and 30% of fatal accidents, respectively.

Table 7. Somatic consequences in attributable cases %¹³

Arterial hypertension	10%
Cerebrovascular accident	24%
Breast malignant tumour	16%
Pancreatic malignant tumour	20%
Psoriasis	33%
Depression	10%

In France, 60% of the accidents where drivers have an illegal level of alcohol in the blood (> 0.5 g/l) occur between midnight and 04.00. The number of alcohol-related cases in which women are responsible for fatal accidents is always 3 to 4 times less than that of men. However, the number of female drivers arrested for breaking the law and nighttime accidents involving one single vehicle is on the increase amongst women in Anglo-Saxon countries. Preventive actions should take into consideration the behavioural differences between men and women before driving.

Alcohol could be responsible for 10 to 20% of accidents in the work place

Although this is a recurring problem in the working environment, there have been no recent, precise studies of the implication of alcohol in accidents in the workplace. Some American studies reported in an international working review (Organisation internationale du travail, OIT – international working organisation) that alcohol and drugs trigger between 20% and 25% of accidents in the workplace and up to 30% of work-related deaths.

In France, according to the Association nationale de prévention de l'alcoolisme (Anpa, 2000-2001) (national association for the prevention of alcoholism), alcohol is directly responsible for between 10% and 20% of accidents in the work place, taking all socioprofessional categories into account.

At the SNCF (French railway), alcohol is thought to be involved in 20% of the 13 500 work-related accidents that occur each year, although it has been noted that most of the accidents involved non-alcohol-dependent agents.

The cost of loss of income associated with illness or premature death costs four times more than health expenditure

Analysis of the economic consequences associated with excessive alcohol consumption is an area of vast,

fertile research (most of these publications nevertheless originating from Anglo-Saxon countries). The diversity of the potential effects of alcoholism on the economy in fact implies studies that exceed the strict framework of assessing the repercussions of the disease on the health of individuals. In addition to the costs of the disease, expenditure attributed to alcohol-related criminal offences and road-traffic accidents is also taken account in similar research.

In France, several studies have been devoted to investigating the cost of alcoholism. One of the studies estimates the direct medical costs of alcoholism at 2.4 billion Euros in 1996. Another study exceeds the restrictive framework of analysing care and also includes, in addition to loss of income and production, expenses incurred by criminal offences and road-traffic accidents as well as loss of mandatory samples due to excessive alcohol consumption. The overall amount of losses attributable to alcohol is thus estimated at 17.6 billion Euros. Health costs represent 15% of this total, thus far behind the loss of income and production (50%) and the expenses that road-traffic accidents incur for insurance companies (20%).

These studies, conducted both in France and abroad, emphasise the heavy toll of alcoholism on society and the extent of indirect costs. Conversely, direct medical costs, which are mostly investigated, represent only 10% to 15% of the overall cost of alcoholism according to the studies. These studies also demonstrate the importance of carrying out sound, epidemiological studies in order to estimate the aetiological ratios of costs.

Alcohol-related pathologies

As in many other countries, alcohol misuse is linked with cardiovascular and tumoral pathologies.

Alcohol-related mortality

France falls into the intermediate range in the European Union for per capita deaths directly associated with alcohol (alcohol cirrhosis of liver, alcoholic psychosis and upper aero digestive tracts cancer), with 37 (per 100,000 deaths) relatively far behind Austria (57) and Italy (56). More deaths in other categories may be (partly) attributed to alcohol and must therefore be taken into account in estimating total deaths attributable to alcohol (Table 8). The mortality rate attributable to alcohol thus increases from 37 to 51.6, and is much

Table 8. Estimated alcohol-related mortality by diagnostic (ICD-9) and sex in France¹⁴

	MF	Males	Females	Total
Alcoholic psychosis and alcohol dependence syndrome (ICD 291-303)	1	2012	552	2565
Alcoholic cirrhosis of liver, and alcoholic liver damage unspecified (ICD 571.0-3.5)	0.8	4698	2022	6720
Cancer of the lip/oral cavity/pharynx/larynx/oesophagus/stomach (ICD 140-149, 150, 161)	0.8	8381	1186	9566
Respiratory tuberculosis (ICD 011-412)	0.33	200	96	296
Homicide (E960-E969)	0.5	207	116	323
Suicide (E950-E959)	0.25	2288	741	3029
Motor and other road vehicle accidents (E810-819, E826-829)	0.33	1920	758	2677
Other accidents and violent deaths (ICD 780-799)	0.1	2035	1145	3179
Unspecified reasons (ICD 799.9)	0.1	573	279	852
Total		22313	6894	29208
Ratio (per 100.000 people)		80.9	23.7	51.6
Reference: 1990 national population census				

Table 9. Alcohol cirrhosis of liver, alcoholic psychosis and upper aero digestive tracts cancer deaths in France¹⁰

	1993	1994	1995	1996	1997	1998
Males	16876	16433	16473	16467	15902	16272
Females	4544	4514	4600	4622	4511	4567
Total	21420	20947	21073	21089	20413	20839

Source: INSERM/SC8–Le Vésinet.

higher among men (80.9) than women (23.7): 3.4 times higher.

From 1993 to 1993, the number of deaths associated with alcohol use is quite stable, among males and females (Table 9).

Table 10. Deaths attributable to alcohol (in %) in France in 1998, according to age and sex¹⁰

	35-44 years	45-54 years	55-64 years	65-74 years
Males	21.6	35.4	38.7	27.0
Females	14.3	18.2	17.8	13.2
Total	19.3	30.3	32.5	22.1

Source: INSERM/SC8–Le Vésinet.

Among males and females, the highest percentages of deaths attributable to alcohol are between the ages of 45-54 and 55-64: among men, it is more than one out of three deaths attributable to alcohol (from 35.4 to 38.7, Table 10).

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