TECHNICAL REPORT ON ALCOHOL 2024

Consumption and consequences

Alcohol is the most widely consumed psychoactive substance and is associated with a significant burden of disease and mortality.

Spanish Monitoring Centre for Drugs and Addictions

MINISTERIO DE SANIDAD
SECRETARÍA GENERAL DE SANIDAD
DELEGACIÓN DEL GOBIERNO PARA EL PLAN NACIONAL SOBRE DROGAS

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Abbreviations

AEAT	Agencia Estatal de Administración Tributaria (Spanish Tax Administration Agency)
AUDIT	The Alcohol Use Disorders Identification Test
AUDIT-C	AUDIT alcohol consumption questionnaire
COVID-19	Coronavirus Disease 2019
DGPNSD	Government Delegation for the National Plan on Drugs
EDADES	Survey on Alcohol and Drugs in the General Population in Spain
WWTPs	Wastewater treatment plants
ESPAD	The European School Survey Project on Alcohol and Other Drugs
ESTUDES	Survey on Drug Use in Secondary Education in Spain
MAA	Deaths Attributable to Alcohol
OEDA	Spanish Monitoring Centre for Drugs and Addictions
WHO	World Health Organisation
py	person-years at risk
SEIDA	State Information System on Drugs and Addictions
FASD	Fetal Alcohol Spectrum Disorders
SDU	Standard Drink Unit

1 Introduction

Alcoholic drinks have been present in our society for centuries and their consumption is common for a large part of the population. Many of those who use do not seem to suffer negative effects, but many others suffer both short- and long-term effects. Alcohol is one of the main risk factors for disease burden in Spain and, in addition to being an addictive substance that can lead to dependence, it contributes to the development of multiple health problems and injuries, including cardiovascular, liver, neuropsychiatric and communicable diseases, among others. There is also strong evidence of a correlation between alcohol consumption and certain types of cancer, with a demonstrated dose-response relationship, implying that any level of consumption increases the risk of cancer [1,2]. Moreover, the impact of its consumption goes beyond the health of the person who consumes it, as it can also cause harm to third parties such as road traffic injuries, violence or Fetal Alcohol Spectrum Disorder (FASD). Beyond health, it also has effects on the economy and society as a whole. It is a fact that the distribution of consumption and its consequences are not homogeneous in society, mainly affecting the most disadvantaged groups and contributing to increasing inequalities.

In order to reduce alcohol-related harm, a cross-sectoral approach is needed, and building such an approach requires analysing and using available data and knowledge. To contribute to this process, in order to bring together in a comprehensive document much of the existing information scattered in different sources, the Spanish Observatory on Drugs and Addictions (OEDA) produced a first monograph on alcohol, published by the DGPNSD in 2021 [3]. The new monograph we now present updates the information on alcohol, incorporating new data from the information systems of the OEDA together with information from other relevant reliable sources. Thus, it aspires to be a useful document for all the agents involved, with the aim of being updated periodically so that the most up-to-date information is available at all times.

1.1 Situation worldwide

As published by the World Health Organisation (WHO) [4], based on the latest World Report on Alcohol and Health [2]:

- Harmful use of alcohol is a causal factor in more than 200 diseases and disorders, including, among others, non-communicable diseases such as cancer, cardiovascular, liver and neuropsychiatric diseases.
- There are 3 million deaths worldwide each year due to harmful use of alcohol, accounting for 5.3% of all deaths.
- Overall, 5.1% of the global burden of disease and injury is attributable to alcohol consumption, calculated in terms of disability-adjusted life years (DALYs).
- Beyond the health consequences, harmful alcohol consumption causes significant social and economic losses to individuals and society at large.
- Alcohol consumption causes death and disability at a relatively early age. Among 20–39-year-olds, approximately 13.5% of all deaths are attributable to alcohol.

- There is a causal link between harmful alcohol consumption and a range of mental and behavioural disorders, as well as non-communicable diseases and injuries.

Due to the burden attributable to alcohol, alcohol monitoring and surveillance are part of several international frameworks.

Sustainable Development Goal (SDG) 3.5 of the United Nations 2030 Agenda focuses on strengthening the prevention and treatment of substance abuse, including substance abuse and the harmful use of alcohol [5]. The inclusion of a specific target on the harmful use of alcohol demonstrates the key role of alcohol in the global development agenda.

The WHO Global Strategy to Reduce the Harmful Use of Alcohol [6], negotiated and agreed by all Member States in 2010, represents the international consensus that reducing the harmful use of alcohol and its associated health and social burden is a Public Health Priority. It reflects the commitment of WHO Member States to continuous action at all levels. It also builds on strategic global and regional initiatives, such as the Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020 [7], which includes among its targets a relative reduction of at least 10% in the harmful use of alcohol.

However, the pace of alcohol policy development and implementation has been uneven across WHO regions, and the resources and capacities for implementation of the WHO Global Strategy to Reduce the Harmful Use of Alcohol 10 years after its adoption do not match the scale of the problems. On this basis, the WHO Executive Board called for accelerated action to reduce the harmful use of alcohol and called for the development of an action plan (2022-2030) to effectively implement the Global Strategy to Reduce the Harmful Use of Alcohol as a Public Health Priority.

1.2 Situation at European level

The WHO European Region continues to have the highest level of per capita alcohol consumption in the world [2, 8], despite a decrease from 12 litres in 2000 to 9.5 litres in 2019, which corresponds to a decrease of 10% in 2010 and 21% in 2019. Annually, each adult (over the age of 15) in the Region drinks an average of 9.5 litres of pure alcohol, equivalent to 190 litres of beer, 80 litres of wine or 24 litres of spirits. In addition, there are large differences in estimated alcohol consumption between countries in the Region, ranging from 0.9 to 14.3 litres per capita per year in 2019, and the COVID-19 pandemic has exacerbated existing health inequalities by having a greater impact on vulnerable groups [9]. It should also be noted that Europe is the WHO region with the highest percentage of deaths attributable to alcohol consumption (10.1%) [2].

The “WHO European Action Plan to Reduce the Harmful Use of Alcohol 2012-2020” [10] presents evidence-based policy options to reduce the harmful consequences of alcohol use, such as the SAFER initiative [11]. It is a technical package with five high-impact strategies to help governments reduce the harmful use of alcohol and related health, social and economic consequences. However, implementation of these measures was generally poor [8].

On the other hand, the European Programme of Work 2020-2025, “United Action for Better Health in Europe” [12] lists three core priorities, including promoting the health and well-being of the population (Core Priority 3). This requires specific public health efforts in all aspects of health

and well-being. Priority areas for action have been identified for the 2022-2023 period, with a particular focus on the main flagship initiatives envisaged to move the agenda forward, including tackling alcohol misuse.

The WHO European Region has achieved or is on track to achieve some of the objectives of Core Priority 3, but a number of important challenges remain. For example, it performs worst among WHO regions for two risk factors that are responsible for a high burden of disease and are preventable: alcohol and tobacco use. Alcohol consumption has detrimental effects on many health problems, exacerbating health inequalities in the population. It negatively affects 13 of the 17 Sustainable Development Goals (SDGs), with a direct impact on many of the health-related SDG targets [13]. Finally, the effect of the COVID-19 pandemic has added additional stress to the efforts that Member States will have to make to achieve the health-related SDGs by 2030.

2 Objectives

The overall objective is to provide an overview of the characteristics, evolution and consequences of alcohol consumption in different populations to support the design and evaluation of policies aimed at preventing alcohol consumption and related problems.

From this general objective, the following specific objectives are set:

To establish the characteristics of alcohol consumption according to surveys:

- Prevalence of alcohol consumption in the general population.
- Prevalence of alcohol consumption in certain groups.
- Relevant consumption patterns.
- Availability and perceived risk for various drinking behaviours.
- Visibility of alcohol-related problems.
- Relationship between alcohol consumption and certain socio-demographic characteristics.
- Prevalence of problem drinking: drinking above the low-risk level and risky drinking.
- Time evolution of the above-mentioned aspects.

To identify the consequences of alcohol consumption:

- Admissions to treatment for alcohol use disorder.
- Hospital emergencies related to alcohol consumption alone or in combination with other drugs.
- Mortality due to acute reaction to alcohol together with other drugs, and study of mortality attributable to alcohol consumption.

To examine the availability:

- Accessibility of alcoholic beverages to minors.
- Sales of alcoholic beverages.

To ascertain the population's perception:

- Risk perception.
- Views on certain alcohol policies.

3 Methodology

3.1 Sources of information

This document contains the most relevant information on alcohol consumption published by the Government Delegation for the National Plan on Drugs (DGPNSD). This information comes from the Spanish Monitoring Centre for Drugs and Addictions' (OEDA) survey programmes and indicators of problems associated with consumption and addictions complemented with other official sources on specific issues.

From this diversity of sources, it is possible to obtain an overall vision that allows for a multifaceted analysis of both the characteristics and the consequences of alcohol consumption.

3.2 Surveys on the use of psychoactive substances including alcohol:

This *Alcohol Monograph 2024* includes information from the most recent editions of the following national surveys promoted and funded by the DGPNSD, with the collaboration of the Autonomous Regions:

- **Survey on Drug Use in Secondary Education in Spain (ESTUDES 2023) [14]:** carried out among students aged 14-18, every two years since 1994.
- **Pilot study on Drug Use and Addictions in Secondary School students aged 12 and 13 years old of 1st and 2nd year of Compulsory Secondary Education (ESO) in Spain (ESTUDES 2023 12 and 13 years old of 1st and 2nd year of Compulsory Secondary Education) [15]:** This is a pilot survey, carried out for the first time in students aged 12 and 13 years old.
- **Survey on Alcohol and Drugs in the home population aged 15 to 64 in Spain, EDADES 2022 [16]:** carried out in the home population aged 15 to 64 years old, every two years, since 1995.
- **Survey on Health and Drug Use among Prisoners, ESDIP 2022 [17]:** conducted every 5 years since 2006.

3.3 Indicators of the State Information System on Drugs and Addiction (SEIDA)

The State Information System on Drugs and Addictions (SEIDA) is made up of four main indicators (admissions to treatment for drugs, admissions to treatment for behavioural addictions, hospital emergencies, and mortality) and two cross-cutting indicators that are obtained by crossing information on these indicators from surveys and other sources of information (problematic use of psychoactive substances and infectious diseases related to the use of psychoactive substances).

The main indicators (admissions to treatment for drugs, admissions to treatment for behavioural addictions, hospital emergencies, and mortality) collect information on an annual basis and are managed within the framework of the National Plan on Drugs as an inter-institutional collaboration in

which the Autonomous Regions play a very active role, as well as the institutions from which the information comes (centres in the addiction care network, hospitals, institutes of legal medicine and toxicological laboratories). In some cases, local councils support the data compilation and filtering services.

- **Indicator Admissions to treatment for the use of psychoactive substances [18]**: reports, since 1987, the number and characteristics of people receiving health care for drug use in outpatient centres of the public and subsidised network of the Autonomous Regions. The collection of data on alcohol has been carried out systematically, at the national level since 2008. In previous years, data on alcohol was only available for some Autonomous Regions.

- **Indicator Admissions to treatment for behavioural/non-substance addictions [19]**. It was collected for the first time during 2020. It reports on the number and characteristics of people receiving health care for behavioural/non-substance addictions in outpatient facilities. In 2020, reporting was partial and in 2021 it was collected for the first time throughout Spain. Therefore, this indicator does not include alcohol.

- **Indicator on hospital emergencies related to the use of psychoactive substances [20]:** reports, since 1987, the characteristics of hospital emergencies related to the non-medical or non-therapeutic use of psychoactive substances in Spain by analysing a sample of emergencies in the main hospitals in the country. As this is an indicator designed to report episodes related to illicit drug use, the presence of alcohol is only collected when it appears in association with other psychoactive substances.

- **Indicator on mortality due to acute reaction to psychoactive substances [21]:** This is a specific mortality record initiated in 1983 that collects information on court-involved deaths, where the direct and fundamental cause of death is an acute reaction to the non-medical and intentional use of psychoactive substances. As in the previous indicator and given that the primary objective is the analysis of mortality associated with illicit drug use, alcohol is only reported when it accompanies other psychoactive substances.

3.4 Other relevant sources of information

The information on alcohol consumption in the general population recognised through the surveys has been complemented by information on the supply of alcoholic beverages with the following source of information:

- **Sale of alcoholic beverages. Annual Tax Collection Reports, Spanish Tax Administration Agency (AEAT) of the Ministry of Finance [22].**

Information on the impact of alcohol consumption on mortality, which in the indicators designed to detect events associated with illicit drug use is necessarily partial, has been complemented with the following source of information:

- **"Study updating the estimate of mortality attributable to alcohol in Spain with the latest available data".** Study funded by the Government Delegation for the National Plan on Drugs, Ministry of Health: Contract awarded to the Biomedical Research Networking Centre (CIBER) dated 22nd February 2023 [File No. 0102318CM005].

Information on alcohol content in wastewater, useful for the monitoring of alcohol consumption in the population, has been obtained from the following source of information:

- **The Spanish Wastewater-Based Epidemiology Network (ESAR-net) [23].** This research network analyses metabolites of nicotine, alcohol and other drugs in wastewater. In the case of alcohol, it measures the presence of ethyl sulphate, and from this it estimates the ethanol consumption in the population, expressed in L/day/1,000 inhabitant.

3.5 Definitions

The definitions used throughout the document are as follows:

Alcoholic beverage: an actual alcoholic strength by volume of more than 1.2 % vol. [24]

Participation in *botellón* (gathering in public spaces to drink store-bought alcohol): shared consumption of alcoholic beverages on the streets or in spaces open to the public.

Average alcohol consumption: the usual consumption of alcohol by an individual over a period of time, usually referring to daily or weekly consumption.

Low-risk alcohol consumption [25]: Average alcohol consumption above which there is a significant increase in mortality, but this does not mean that below this level mortality is not increased. Considering the physiological differences and the ability to metabolise alcohol between males and females, the low-risk limit is set at a maximum of 20 g/day (2 SDUs) for males and 10 g/day (1 SDU) for females, assuming zero risk.

At risk alcohol consumption [26]: a person is considered to be a risky alcohol consumer if he/she meets any of these criteria:

- AUDIT Questionnaire (*Alcohol Use Disorders Identification Test)*: ≥8 points for males and ≥6 points for females.
- Average weekly consumption >28 Spanish Standard Drink Units (SDUs)/week in men and >17 SDUs/week in women, in the last 7 days.

Average age of onset in alcoholic beverages consumption: average in years of the age of onset of use.

Episodes of heavy drinking, or *Binge drinking*, in the past 30 days:

Binge drinking (ESTUDES): consumption of 5 or more glasses of alcoholic beverages on the same occasion, i.e. within approximately two hours.

Binge drinking (EDADES): consumption of 5 or more alcoholic drinks if male, or 4 or more alcoholic drinks if female, on the same occasion, i.e. in a row or within two hours of each other.

Acute alcohol intoxication. Drunkenness: Subjective consideration of the respondent to the direct question "how many days have you been drunk in your life, in the last 12 months or in the last 30 days?"

Student population: refers to the population of students aged 14 to 18 years old in secondary education in public or private or state-subsidised centres, which constitutes the sample framework of the ESTUDES survey.

General population: refers to the home population aged 15-64, which constitutes the sample frame of the EDADES survey.

Prevalence of alcohol consumption: proportion of the population reporting having consumed alcoholic beverages. Calculated on a sample, it is generalised to the reference population. It is usually indicated in relation to a specific time period (some time in lifetime, last 12 months, last 30 days, last 7 days and daily for the last 30 days).

Standard Drinking Unit (SDU) of alcohol: in Spain it is equivalent to 10 grams of alcohol, which is approximately the average content of a glass of 100 ml of wine or cava, or 1 glass of 300 ml of beer or a glass of 30 ml of spirits. The alcohol content in grams is estimated for each beverage with the formula:

$$\text{Alcohol content} = \frac{\text{Amount of beberage (ml)} \times \text{alcoholic stgrenght (°)} \times 0.8}{100}$$

4 Alcohol consumption

4.1 Survey on Drug Use in Secondary Education in Spain (ESTUDES 2023)

The 2023 ESTUDES survey was conducted among Secondary School students aged 14 to 18 from public, private and state-subsidised schools throughout Spain. Results are obtained from 888 schools and 1992 classrooms, with a final valid sample of 42,208 students. The sample is nationally representative. This survey has been carried out every two years since 1994 and is promoted and financed by the DGPNSD and has the collaboration of the Autonomous Regions and Cities.

Data on alcohol consumption from the survey on Drug Use in Secondary Education in Spain in the year 2023 are summarised below.

4.1.1 Prevalence of consumption

Among all the substances analysed in the ESTUDES survey, alcohol is the psychoactive substance most commonly used by students aged 14-18. 75.9% admit to having consumed alcoholic beverages at some point in their lives, with the vast majority of these cases having consumed alcohol in the last 12 months, with a prevalence of 73.6% in this time period.

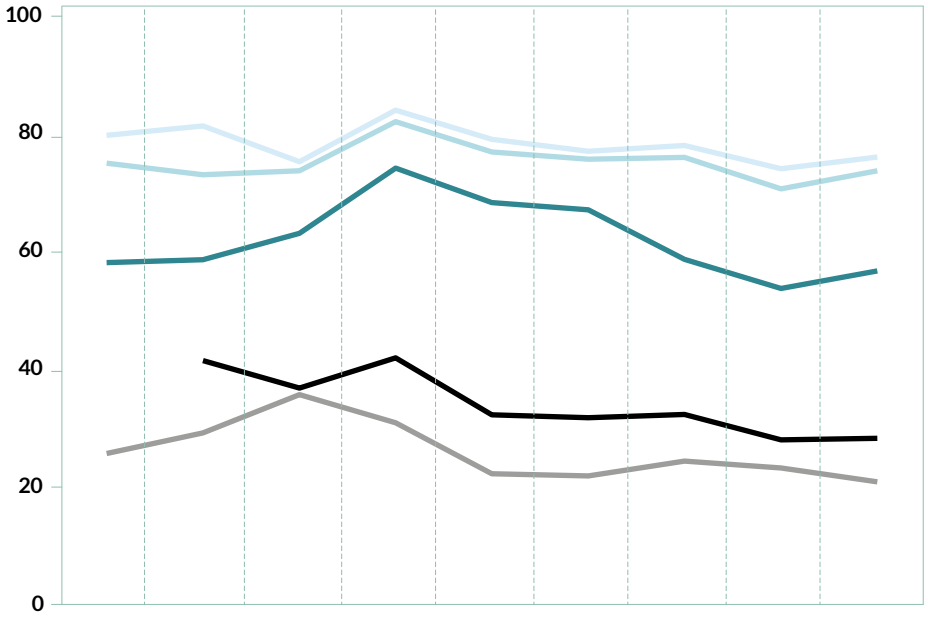
Regarding the last 30 days, slightly more than half of the students (56.6%) admit to having drunk alcohol, with 20.8% having experienced drunkenness in the same period and 28.2% having indulged in *binge drinking*, i.e. drinking 5 or more glasses of alcoholic beverages in an interval of approximately two hours.

Contextualising with the historical series, and although since 2012 there has been a general trend towards less alcohol consumption, there is a slight increase compared to the data obtained from the survey carried out in 2021. The lifetime time period increases by 2%, rising to 3% for the last 12 months and the last 30 days.

Despite this slight increase in the prevalence of alcohol consumption in the last 30 days, the proportion of students who have been drunk in the same time period has decreased (23.2% in 2021 and 20.8% in 2023). For *binge drinking*, the figure is similar to that of 2021, rising from 27.9% to 28.2%. Both indicators show less heavy drinking among students who drink alcoholic beverages on a frequent basis.

Finally, with regard to the age at which the consumption of this drug begins, it is observed that those students aged 14-18 who have drunk alcoholic beverages at some time in their lives state that their first consumption was at 13.9 years old on average, similar to the average that has been obtained over the last decade. Weekly alcohol consumption starts, on average, at the age of 15, and the first drunkenness is experienced at the age of 14.5, which is the earliest age detected since 2012, the first year in which this data was recorded.

FIGURE 1. Prevalence of alcoholic beverages consumption prevalence of self-reported drunkenness (last 30 days), prevalence of binge drinking (last 30 days) among Secondary School students aged 14-18 (%). Spain, 2006-2023.



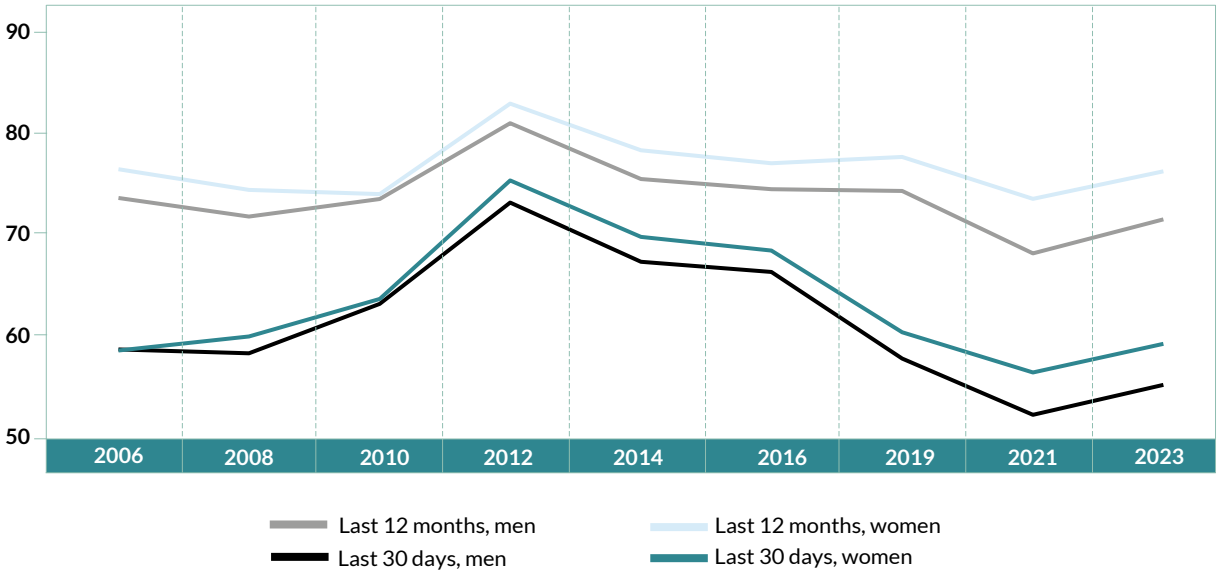
	2006	2008	2010	2012	2014	2016	2019	2021	2023
Lifetime	79.6	81.2	75.1	83.9	78.9	76.9	77.9	73.9	75.9
Last 12 months	74.9	72.9	73.6	81.9	76.8	75.6	75.9	70.5	73.6
Last 30 days	58.0	58.5	63.0	74.0	68.2	67.0	58.5	53.6	56.6
Drunkenness last 30 days	25.6	29.1	35.6	30.8	22.2	21.8	24.3	23.2	20.8
Binge drinking last 30 days		41.4	36.7	41.8	32.2	31.7	32.3	27.9	28.2

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

If we look at the level of alcohol consumption **by sex** of the students, we see a higher level of alcohol consumption in the last 12 months among girls than among boys. Looking at the historical series, although prevalence in women has been higher than in men since 1996, the gap has been increasing since 2012 and reached its maximum difference in 2021 (5.5%), with a slight rapprochement of prevalence in 2023 (71.2% among men and 76.1% among women).

Within the last 30 days, higher alcohol consumption continues to be observed among women. In evolutionary terms, an increase in this gap is again detected since 2012, which is more pronounced from 2021 onwards. Thus, in 2023, 54.5% of boys and 58.7% of girls reported alcohol consumption in the last 30 days.

FIGURE 2. Prevalence of alcoholic beverages consumption among Secondary School students aged 14-18, by sex (%). Spain 2006-2023.



SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

With regard to the **age** of the students, it is observed that as age increases, so does alcohol consumption in all the time periods analysed (Table 1), with the largest increases occurring between 14 and 16 years old and decreasing considerably between 17 and 18 years old. It is in the last 30 days that the greatest differences by age are found, with a prevalence of 36.5% among 14-year-olds and a doubling to 73.8% among 18-year-olds.

TABLE 1. Prevalence of alcoholic beverages consumption among Secondary School students aged 14-18, by sex and age (%). Spain, 2006-2023.

LIFETIME									
	2006	2008	2010	2012	2014	2016	2019	2021	2023
Total	79.6	81.2	75.1	83.9	78.9	76.9	77.9	73.9	75.9
Sex									
Men	78.4	80.8	74.9	82.9	77.8	75.7	76.3	71.6	73.7
Women	80.7	81.7	75.2	84.9	80.1	78.2	79.4	76.3	78.1
Age									
14 years old	57.1	62.6	49.7	65.9	60.1	57.1	58.3	53.5	58.0
15 years old	76.1	78.7	71.5	77.7	73.7	75.4	72.5	68.3	70.1
16 years old	86.0	86.2	81.6	86.2	84.1	83.1	84.3	78.8	81.2
17 years old	91.2	90.5	87.8	90.8	90.6	89.9	88.5	86.0	86.7
18 years old	92.3	92.3	88.6	92.6	92.4	91.9	89.0	87.9	88.2
LAST 12 MONTHS									
	2006	2008	2010	2012	2014	2016	2019	2021	2023
Total	74.9	72.9	73.6	81.9	76.8	75.6	75.9	70.5	73.6
Sex									
Men	73.4	71.5	73.3	80.9	75.3	74.3	74.1	67.8	71.2
Women	76.3	74.2	73.8	82.9	78.2	76.9	77.5	73.3	76.1
Age									
14 years old	50.9	53.1	48.0	63.1	57.4	55.3	56.1	50.6	55.0
15 years old	70.9	69.6	70.0	75.3	71.2	73.9	70.2	64.5	67.7
16 years old	82.1	77.6	80.3	84.2	82.2	82.1	82.5	75.3	79.3
17 years old	87.4	84.1	86.1	89.2	88.7	88.7	86.7	82.6	84.7
18 years old	88.2	84.2	86.4	91.3	90.7	90.6	86.9	85.2	86.5
LAST 30 DAYS									
	2006	2008	2010	2012	2014	2016	2019	2021	2023
Total	58.0	58.5	63.0	74.0	68.2	67.0	58.5	53.6	56.6
Sex									
Men	58.1	57.7	62.7	72.9	66.9	65.9	57.2	51.5	54.5
Women	58.0	59.4	63.2	75.2	69.5	68.1	59.8	55.8	58.7
Age									
14 years old	31.7	36.2	38.1	53.2	48.4	46.1	36.0	34.1	36.5
15 years old	50.7	52.9	58.9	66.0	61.3	64.6	49.9	45.9	49.2
16 years old	65.3	63.8	70.0	75.6	74.0	73.1	65.3	57.1	61.7
17 years old	74.2	71.9	74.8	82.4	80.8	81.2	72.9	66.9	69.7
18 years old	76.5	75.1	77.1	86.4	84.8	84.5	74.7	72.8	73.8

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.2 Acute alcohol intoxication. Self-reported drunkenness.

47.5% of students report having been drunk at some time in their lives, 42.1% of them in the last year. Prevalence drops to 20.8% in the last 30 days.

The prevalence of acute alcohol intoxication or self-reported drunkenness shows some differences according to sex and age of the students (Table 2). Looking at **sex**, we see that among girls there is a greater presence of girls who have been drunk in all time periods, although this difference narrows as the time period analysed gets shorter: 7.3% in their lifetime, 5.8% in the last 12 months and 2.2% in the last 30 days.

TABLE 2. Prevalence of self-reported acute alcohol intoxication (drunkenness) among Secondary School students aged 14-18, by sex and age (%). Spain, 2010-2023.

	LIFETIME							LAST 12 MONTHS							LAST 30 DAYS						
	2010	2012	2014	2016	2019	2021	2023	2010	2012	2014	2016	2019	2021	2023	2010	2012	2014	2016	2019	2021	2023
Total	**58.8**	**60.7**	**50.1**	**48.9**	**51.1**	**48.0**	**47.5**	**52.9**	**52.0**	**42.6**	**42.4**	**44.5**	**39.4**	**42.1**	**35.6**	**30.8**	**22.2**	**21.8**	**24.3**	**23.2**	**20.8**
Sex																					
Men	58.0	59.9	48.7	46.4	48.5	43.8	43.9	52.2	51.7	41.5	40.1	42.3	35.4	39.3	36.4	31.3	22.3	21.2	23.7	20.8	19.7
Women	59.5	61.5	51.4	51.4	53.4	52.4	51.2	53.5	52.3	43.7	44.8	46.5	43.6	45.1	34.8	30.3	22.1	22.3	25.0	25.6	21.9
Age																					
14 years old	27.8	31.5	23.2	23.1	25.8	24.7	22.5	24.6	26.1	19.0	18.8	22.2	20.8	19.5	16.0	12.7	7.6	7.9	9.7	11.7	8.1
15 years old	52.2	47.4	39.8	42.4	40.9	36.9	38.3	47.3	40.2	33.6	36.1	35.6	30.8	33.9	32.0	21.3	14.9	15.8	17.5	16.9	15.2
16 years old	66.2	62.3	56.5	55.9	57.4	53.4	54.1	59.8	53.4	48.8	49.3	50.6	44.5	48.5	38.8	30.9	26.4	25.6	27.7	25.9	24.3
17 years old	76.8	73.1	69.1	69.7	68.6	64.7	63.8	69.1	62.6	59.0	61.5	59.9	51.9	57.0	46.6	38.8	33.1	33.9	35.6	31.9	29.8
18 years old	77.8	80.4	74.1	74.7	70.9	71.5	68.5	69.8	70.5	63.4	65.4	60.3	58.0	59.8	52.8	46.5	37.5	40.4	37.6	35.5	32.3

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

Regarding **age**, we see that the prevalence of acute alcohol intoxication increases with age, irrespective of the time period analysed, but with different increases as we increase from year to year. Thus, 22.5% of 14-year-olds have already experienced acute alcohol intoxication at some time, with this percentage increasing by 15.8% for 15-year-olds (38.3%) and the same increase for 16-year-olds (54.1%). In the next age group, the 17-year-olds, this percentage rises by about 10% (to 63.8%), and halves for the 18-year-olds (68.5%).

Evolutionarily, compared to 2023, acute alcohol poisoning is slightly reduced for the lifetime time period. They increase by 2.7% for the period over the last 12 months (from 39.4% to 42.1%), with the highest increase among males and students aged 16 and 17. At the other end of the scale, prevalence decreases by almost the same proportion for the last 30 days (from 23.2% to 20.8%), with a greater decrease among females and, by age, among younger (14 years old) and older (18 years old) students.

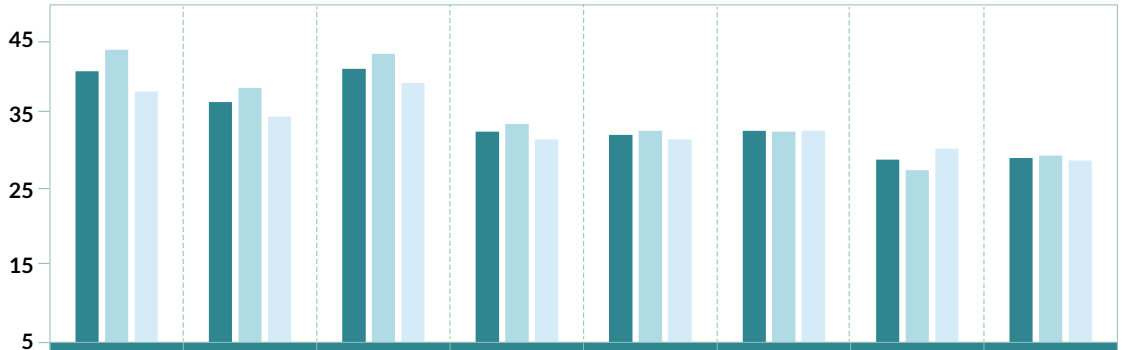
4.1.3 Episodes of heavy drinking. Binge drinking

The behaviour of drinking a total of 5 or more alcoholic drinks on the same occasion (within approximately two hours) is known as *binge drinking* or heavy episodic drinking.

During the year 2023, this behaviour has been performed by 28.2% of pupils aged 14-18 in the last month (Figure 3). Over time, there has been a general downward trend in *binge drinking* since 2008, with prevalence stable below 30% in recent years.

By sex, *binge drinking* was historically more common in boys than in girls, although in recent years this difference is virtually non-existent. In 2023, the lowest prevalence of *binge drinking* in the entire historical series was recorded for girls (27.8%) and the second lowest for boys (28.6%).

FIGURE 3. Prevalence of *binge drinking* among Secondary School students aged 14-18, by sex (%). Spain 2008-2023.

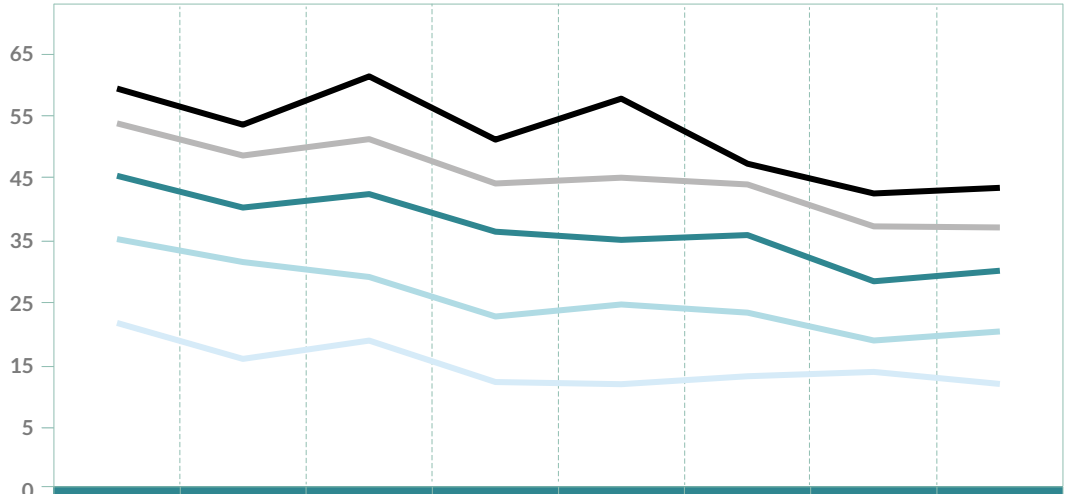


	2008	2010	2012	2014	2016	2019	2021	2023
Total	41.4	36.7	41.8	32.2	31.7	32.3	27.9	28.2
Men	44.7	38.9	44.1	33.4	32.3	32.2	26.3	28.6
Women	38.3	34.5	39.6	31.0	31.0	32.3	29.6	27.8

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

Regarding **age**, *binge drinking* is clearly more frequent the older the age (Figure 4), with prevalences in 2023 ranging from 14.0% in 14-year-old students to 43.6% at 18 years old.

FIGURE 4. Prevalence of *binge drinking* among Secondary School students aged 14-18, by age (%). Spain 2008-2023.



	2008	2010	2012	2014	2016	2019	2021	2023
14 years old	22.9	17.6	20.3	14.2	13.9	15.1	15.7	14.0
15 years old	36.0	32.6	30.4	24.6	26.4	25.2	21.1	22.4
16 years old	45.3	40.6	42.6	37.1	35.9	36.6	29.8	31.4
17 years old	53.0	48.3	50.7	44.2	45.0	44.0	37.9	37.7
18 years old	58.1	52.8	59.9	50.6	56.6	47.1	42.7	43.6

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.4 Places where alcohol is procured and consumed

Regarding the places chosen by students aged 14-18 **for the consumption** of these alcoholic beverages in the last 30 days, bars and pubs were the most frequently mentioned option with 52.8%, followed by clubs with 47.8% and streets, squares, parks, beaches or open public spaces with 47.5% (Table 3).

Over time, we can observe the lower relevance this time of other people's homes for alcohol consumption, being in 2021 the first place chosen by students (56.1%). The restrictions in force in 2021 due to the COVID-19 pandemic on certain premises and leisure habits have probably had some impact on the choice of homes for alcohol consumption.

TABLE 3. Places where Secondary School students aged 14-18 have bought or obtained and where they have consumed alcoholic beverages in the last 30 days (%). Spain, 2023.

	Bought/Obtained			Consumed		
	Total	14-17 years old	18 years old	Total	14-17 years old	18 years old
Supermarkets	54.1	52.3	70.6	-	-	-
Bars or pubs	54.9	52.9	72.7	52.8	50.8	72.0
Clubs	46.3	44.2	66.4	47.8	45.9	65.4
Convenience stores, kiosks, bodegas	49.4	50.0	44.0	-	-	-
Hypermarkets	22.0	21.2	29.8	-	-	-
Other people's houses	36.0	36.0	36.0	45.3	45.1	47.0
House where you live	27.8	27.3	32.9	28.2	27.4	36.0
Internet	2.3	2.2	3.4	-	-	-
Street vending	4.9	4.9	4.9	-	-	-
In streets, squares, parks, beaches or open public spaces	-	-	-	47.5	48.2	40.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

On the other hand, within the same period of the last 30 days, the most common places **for purchasing** alcoholic beverages among students aged 14 to 18 are bars and pubs (54.9%), supermarkets (54.1%) and convenience stores, kiosks or bodegas (49.4%). Among minors, it is worth noting their greater limitation in the purchase of alcoholic beverages and their greater use of convenience stores, kiosks and bodegas for their purchase.

Looking at the historical evolution of alcohol purchases (Table 4), it can be seen that purchases in clubs have increased compared to the previous edition, from 12.8% (2021) to 46.3% (2023).

Purchases in bars and pubs also increased from 48.2% (2021) to 54.9% (2023). This was due to the health restrictions imposed by the COVID-19 pandemic that affected nightlife and that were in place in spring 2021, when the ESTUDES fieldwork for this edition was conducted.

TABLE 4. Places where Secondary School students aged 14-18 have bought or obtained alcoholic beverages in the last 30 days (%). Spain, 2016-2023.

	Bought/Obtained			
	2016	2019	2021	2023
Supermarkets	58.0	54.0	56.3	54.1
Bars or pubs	54.1	54.0	48.2	54.9
Clubs	43.1	43.6	12.8	46.3
Convenience stores, kiosks, bodegas	53.9	49.9	53.9	49.4
Hypermarkets	27.2	21.9	21.2	22.0
Other people's houses	29.1	30.4	40.0	36.0
House where you live	20.4	22.0	28.6	27.8
Internet	1.1	1.2	1.4	2.3
Street vending	5.3	4.4	3.7	4.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

Regarding **how** 14–18-year-old students obtain alcoholic beverages; the most frequently reported fact is that they access alcohol themselves (Table 5). Six out of ten students state that they buy/obtain alcohol directly themselves, while 48.1% do so through other people of legal age.

It can also be observed that the mode of access to alcohol varies depending on whether students are underage (14-17 years old) or not (18 years old). In this case, 91.5% of 18-year-old students who have consumed this substance in the last 30 days have obtained it directly, while in under-age students, acquisition by their own means drops to 56.6%. Among minors, the acquisition of alcoholic beverages through other adults is more prominent (51.4%).

TABLE 5. Ways in which Secondary School students aged 14-18 or 14-17 have bought or obtained alcoholic beverages in the last 30 days, by sex and age (%). Spain, 2023.

	14-18 years old			14-17 years old
	Total	Men	Women	
By themselves	60.0	62.8	57.4	56.6
Through other persons 18 years old or older	48.1	43.2	52.5	51.4
Through other persons under 18 years old	17.4	15.5	19.1	18.8
Other	8.9	9.5	8.4	9.4

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

Similarly, differences can be observed according to sex: male students are more likely to obtain alcohol themselves (62.8% compared to 57.4% for female students) while accessing alcohol through other people of legal age is more frequent among girls than boys (52.5% compared to 43.3%).

4.1.5 Consumption by type of alcoholic beverage

Mixed drinks are the type of alcoholic beverage with the highest prevalence of consumption among students (22.4%), standing out in both sexes, although with greater relevance among girls (23.0% compared to 21.9% among boys) (Table 6). In second place is beer/cider, with a considerably higher prevalence among boys (16.1% compared to 11.1%).

TABLE 6. Prevalence of alcoholic beverages consumption in the last 7 days among Secondary School students aged 14-18, by sex and type of beverage consumed (%). Spain, 2023.

	Total	Men	Women
Any alcoholic beverage	31.6	31.5	31.7
Mixed drinks	22.4	21.9	23.0
Beer/cider	13.6	16.1	11.1
Hard spirits	9.8	9.9	9.7
Fruit spirits	5.7	5.6	5.8
Wine/champagne	5.8	5.9	5.6
Vermouth/sherry/fino	1.6	1.9	1.3

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.6 Participation in botellón (gathering in public spaces to drink store-bought alcohol)

47.4% of students aged between 14 and 18 years old admit to having indulged in *botellón* in the last 12 months. When the time period is adjusted to the last 30 days, the prevalence drops to 19.7%.

Irrespective of the period analysed, this type of drinking is more frequent among girls than among boys (Table 7). By age, it is observed that, as age increases, the presence of young people with this habit also increases, but the percentage increases are decreasing, even reaching a negative value when going from 17 to 18 years old, due to the fact that the age of majority allows them to legally consume alcohol in private premises and businesses.

TABLE 7. Prevalence of participation in botellón in the last 12 months and last 30 days among Secondary School students aged 14-18, by sex and age (%). Spain, 2023.

	Botellón in the last 12 months	*Botellón* in the last 30 days
Total	47.4	19.7
Sex		
Men	44.8	18.9
Women	50.0	20.5
Age		
14 years old	26.6	10.9
15 years old	40.9	17.4
16 years old	54.9	23.4
17 years old	59.6	24.1
18 years old	57.8	23.4

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

In relation to the use of other psychoactive substances, prevalences of use are higher among students who have *binge-drank* in the last 12 months (Table 8), especially for tobacco and cannabis, where the prevalence of students who have used these drugs in the last year is five times higher than among those who have not *binge-drank* (47.8% vs. 9.2% for tobacco, and 37.3% vs. 7.4% for cannabis).

TABLE 8. Prevalence of use of tobacco, hypnosedatives (with or without prescription), cannabis, powder and/or base cocaine, ecstasy, amphetamines and hallucinogens in the last 12 months among Secondary School students aged 14-18 according to whether or not they have indulged in *botellón* in the last 12 months and according to sex (%). Spain, 2023.

	Total		Men		Women	
	Yes *botellón*	No *botellón*	Yes *botellón*	No *botellón*	Yes *botellón*	No *botellón*
Tobacco	47.8	9.2	44.9	7.8	50.5	10.9
Prescription/non-prescription hypnosedatives	18.7	11.1	12.6	7.1	24.4	15.6
Cannabis	37.3	7.4	39.9	7.8	34.9	7.0
Cocaine powder and/or base	3.8	0.8	5.4	1.1	2.4	0.5
Ecstasy	4.1	0.5	4.9	0.7	3.2	0.3
Amphetamines	2.1	0.4	3.2	0.5	1.2	0.3
Hallucinogens	2.3	0.4	3.2	0.7	1.5	0.2

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.7 Reasons for drinking

Having fun is the main reason for drinking alcohol in the last 30 days among students aged 14-18 (68.3%). Although to a lesser extent, the fact that they like the feeling it gives them also receives a significant number of mentions (Table 9). The third reason for boys is the fact that alcohol helps them to loosen up or to flirt more, while for girls it is particularly relevant that it helps them when they are depressed.

TABLE 9. Main reasons why Secondary School students aged 14-18 drink alcohol, by sex (%). Spain, 2023.

	Total		Men		Women	
	Rarely or never	Always or almost always	Rarely or never	Always or almost always	Rarely or never	Always or almost always
It is healthy	96.5	3.5	94.8	5.2	98.0	2.0
To fit into a group or not to feel excluded	92.0	8.0	91.7	8.3	92.3	7.7
To get drunk	87.2	12.8	88.3	11.7	86.2	13.8
To loosen up or to flirt more	80.6	19.4	77.9	22.1	83.0	17.0
To combat depression	75.4	24.6	81.5	18.5	70.1	29.9
They like how it makes them feel	62.2	37.8	62.3	37.7	62.2	37.8
It is fun or livens up parties	31.7	68.3	32.3	67.7	31.2	68.8

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.8 Alcohol consumption among parents

There is a direct relationship between the alcohol consumption of students aged 14-18 and that of their parents (Table 10). In all time periods and for all practices analysed, an increase in prevalence is generally observed among students as parental drinking becomes more frequent. The most pronounced percentage increase is found in cases where the father abuses alcohol consumption every day or almost every day.

TABLE 10. Prevalence of alcohol consumption among Secondary School students according to their parents' alcohol consumption (%) Spain, 2023.

		Students from 14 to 18 years old				
		Alcohol Lifetime	Alcohol L12M	Drunkenness L12M	*Botellón* L12M	*Binge L30D*
Mother	Not drank on any day	71.1	68.7	39.2	43.7	24.6
	Drank on a single day	79.8	77.6	46.1	51.7	30.4
	Drinking only on weekends	79.9	78.0	44.2	51.1	31.9
	Drank moderately every day or almost every day	82.8	80.9	49.0	52.9	30.3
	Abused alcohol every day or almost every day	91.0	87.3	65.9	62.6	50.6
Father	Not drank on any day	68.6	66.2	37.5	42.2	23.0
	Drank on a single day	79.0	77.0	45.4	51.4	29.9
	Drinking only on weekends	78.8	76.9	44.1	50.9	31.4
	Drank moderately every day or almost every day	80.4	77.7	44.8	50.1	29.4
	Abused alcohol every day or almost every day	84.1	79.8	52.3	52.1	36.7

L12M: In the last 12 months; L30D: In the last 30 days
Binge: Binge drinking

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.9 Stimulant drinks with high caffeine content

The prevalence of stimulant drinks with high caffeine content among 14–18 years old was analysed (Table 11), showing that nearly half (47.7%) have had such drinks in the last 30 days, with the prevalence being higher among boys than among girls by 13.7% (54.4% vs. 40,7%).

In the male group, although a considerable prevalence of consumption of these drinks is already observed among the youngest (14 years old) (46.1%), a significant increase is observed among 15 years old (52.4%) and it stabilises among 16-17 and 18 years old, reaching close to, but not quite reaching 60%.

In the case of girls, the prevalence of consumption remains stable with a slight increase from 14 to 17 years old, with the difference in consumption of these drinks in comparison to boys reaching its maximum among 16 and 17 years old students at almost 20%. Among female students aged 18, there is an upturn in consumption, with the prevalence of these drinks rising to 44.2%.

With regard to **mixing stimulant drinks with a high caffeine content with alcohol**, 19.5% of students aged 14 to 18 years old have consumed these drinks in the last 30 days. In terms of sex, prevalence is similar among 14 and 15 years old male and female students, with consumption becoming more common among 16 and 17 years old boys, and then declining somewhat among 18 years old due to a spike in consumption among girls of that age.

In both the male and female groups, an increase in the prevalence of consumption is generally observed as age increases, although in males it reaches a maximum at 17 years old, while in girls it increases until 16-17 years old, where it stabilises, with a final upturn among 18 years old.

TABLE 11. Prevalence of consumption of stimulant drinks with high caffeine content and of stimulant drinks with high caffeine content mixed with alcohol in the last 30 days among Secondary School students aged 14-18, by sex and age (%). Spain, 2023.

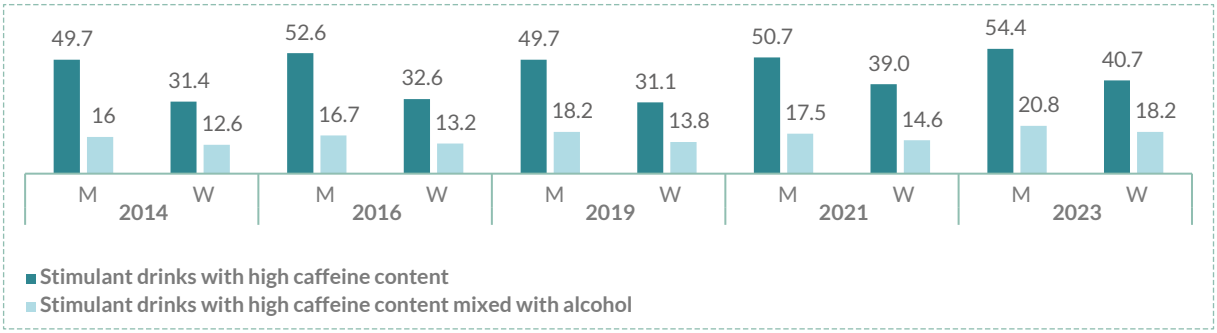
	Total	Sex		14 years old		15 years old		16 years old		17 years old		14-17 years old		18 years old	
		M	W	M	W	M	W	M	W	M	W	M	W	M	W
Stimulant drinks with high caffeine content	47.7	54.4	40.7	46.1	39.4	52.4	39.9	58.1	41.4	57.2	41.0	54.0	40.5	59.8	44.2
Stimulant drinks with high caffeine content mixed with alcohol	19.5	20.8	18.2	12.0	12.7	16.6	17.0	24.1	20.0	26.8	20.6	20.4	17.8	26.0	23.4

M=Men, W=Women

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

In terms of consumption of both caffeine-rich stimulant beverages and caffeine-rich stimulant beverages mixed with alcohol, both for boys and girls, the prevalences recorded in 2023 are the highest in the entire historical series (Figure 5).

FIGURE 5. Prevalence of consumption of stimulant drinks with high caffeine content and of stimulant drinks with high caffeine content mixed with alcohol in the last 30 days among Secondary School students aged 14-18, by sex (%). Spain, 2014-2023.



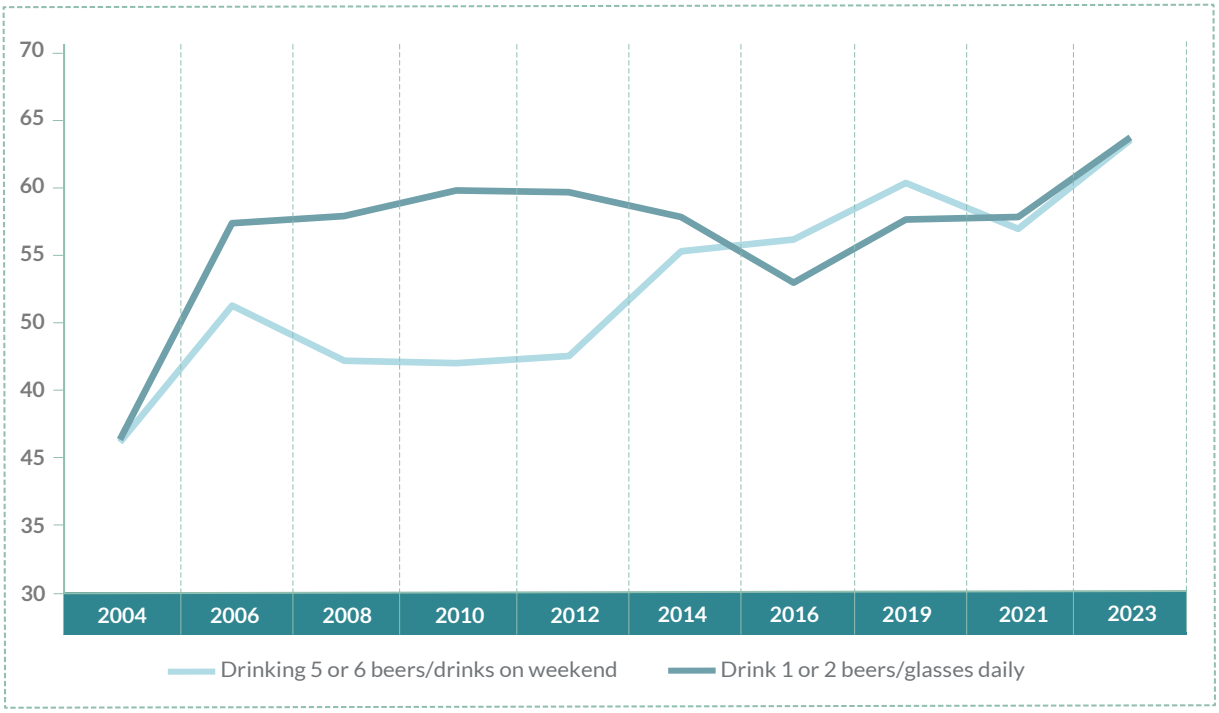
SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

By sex, it is observed that among male students there is a higher consumption in the last 30 days of both caffeine-rich stimulant drinks (from 50.7% in 2021 to 54.4% in 2023) and caffeine-rich stimulant drinks mixed with alcohol (from 17.5% in 2021 to 20.8% in 2023), while among female students there is a more pronounced increase in the consumption of caffeine-rich stimulant drinks mixed with alcohol (from 14.6% in 2021 to 18.2% in 2023).

4.1.10 Risk perception

Risk perception gives an idea of the extent to which students think that a certain behaviour may cause problems. In this sense, the risk associated with alcohol consumption behaves as a protective element against alcohol consumption and acts as a deterrent to students considering alcohol consumption.

FIGURE 6. Perceived risk of regular drinking among Secondary School students aged 14-18 (percentage of students who think that regular drinking can cause a lot or a fair amount of problems). Spain, 2004-2023.



SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

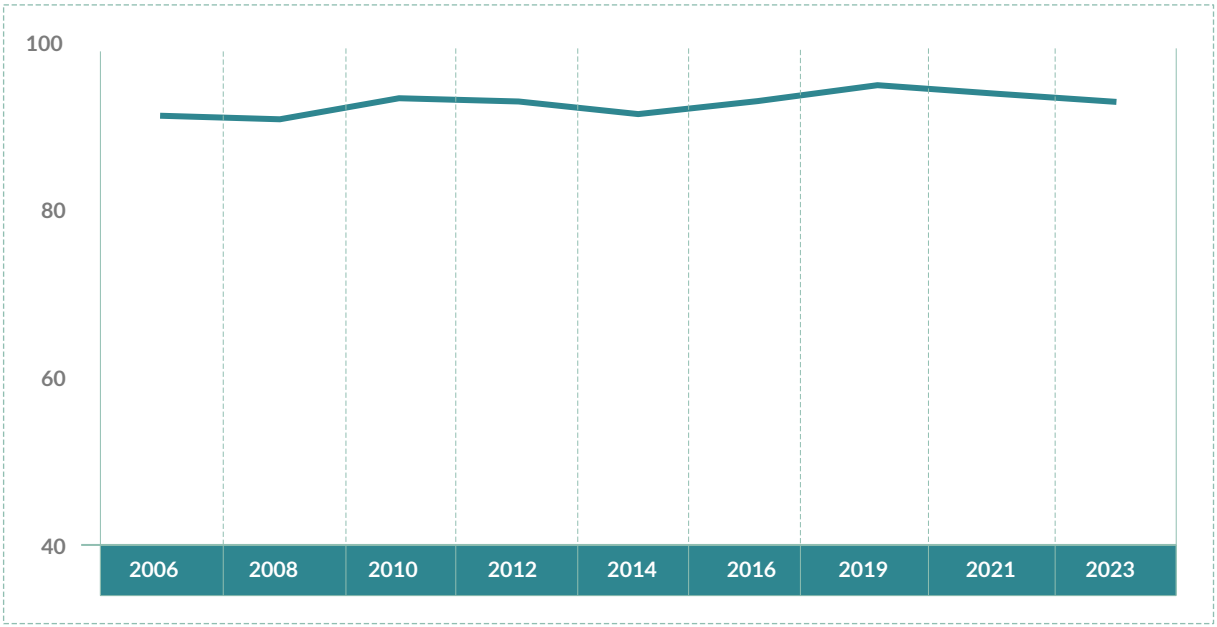
There is a consensus among students regarding the risk associated with regular alcohol consumption. The perceived risk associated with drinking has increased in 2023 compared to 2021, despite the increase in the prevalence of drinking among 14–18-year-olds: 63.4% of 14–18-year-olds consider that having 5 or 6 drinks of alcohol at the weekend can cause a lot or a fair amount of problems, which is 6.5% higher than in 2021, and the highest proportion recorded in the whole historical series (Figure 6). On the other hand, daily alcohol consumption (having 1 or 2 beers/drinks every day) is considered dangerous by 63.6% of students, which is 5.9% higher than in 2021 and again the highest proportion recorded since the survey has been carried out.

4.1.11 Perception of availability

Perceived availability of alcohol refers to the extent to which students consider it difficult or easy to obtain alcohol. This perceived availability of alcohol has hardly changed and has remained stable over the years.

Alcohol and tobacco are by far the most accessible substances for students aged 14-18. In this sense, 92.9% of them do not perceive any difficulty in obtaining alcoholic beverages, a scenario that has hardly changed over the historical series (Figure 7). This situation shows that legally traded substances are perceived to be fully accessible to students who want to purchase them, when they should not be accessible to under-18s.

FIGURE 7. Perceived availability of alcohol among Secondary School students aged 14-18 (% of students who think it would be relatively easy or very easy for them to get each drug if they wanted to) (%). Spain 2006-2023.



SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.12 Leisure activities and alcohol consumption

Analysing alcohol consumption in the last 12 months according to the students' leisure activities, it can be seen that students who go out at night frequently consume more alcohol (Table 12). This is also the case for those who do not read books for fun and for those who regularly go out in the evenings with their friends. On the other hand, alcohol consumption levels are similar for those who have not practised any sport and those who have practised some physical activity.

TABLE 12. Prevalence of alcohol use in the last 12 months among Secondary School students aged 14-18 by leisure activities (%). Spain, 2023.

	Alcohol
Has played any sport	73.7
Has not played any sport	74.2
Has read books for fun	69.7
Has not read books for fun	80.1
Has been out with friends in the evenings	75.0
Has not been out with friends in the evenings	47.5
Has been out with friends at night	85.7
Has not been out with friends at night	42.0
Has other hobbies	71.4
Does not have other hobbies	76.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.13 Undesirable consequences of alcohol consumption

Below is a table showing some undesirable situations that students have experienced in the last year depending on whether or not they have consumed alcohol: Major conflict with parents or siblings, the inability to remember what happened the night before after going out, having difficulty concentrating at school the next day after going out, being expelled from school for a full day or more, having a hangover, having had sex that they regretted the next day, having had sex without a condom, having suffered a psychotic break (hallucinations, delusions...), having suffered an anxiety attack or having been bullied.

Alcohol consumption causes more undesirable situations to be experienced, with the prevalence of these situations increasing as alcohol consumption becomes more intense. It is worth noting the large increase in some situations such as: the inability to remember what happened the night before after going out or having a hangover. However, having been bullied is not increased by alcohol consumption.

TABLE 13. Prevalence of experiencing certain situations in the last 12 months among Secondary School students aged 14-18 according to whether or not they have consumed alcohol (%). Spain, 2023.

	Arguing	Not remembering	Not concentrating	Expelled	Hangover	Regret of sexual intercourse	Sexual intercourse without a condom	Psychotic break	Anxiety	Bullying
TOTAL STUDENTS	**40.4**	**20.3**	**18.2**	**6.9**	**34.9**	**7.5**	**16.9**	**3.7**	**33.7**	**10.5**
Has consumed alcohol in the last 30 days	46.2	32.0	26.0	9.0	55.5	11.1	24.8	4.9	37.9	10.3
Has not consumed alcohol in the last 30 days	32.8	5.2	8.0	4.3	8.7	3.0	6.7	2.1	28.4	10.7
Has been drunk in the last 30 days	50.5	51.5	35.5	11.3	76.5	16.5	35.0	7.1	41.8	9.0
Has not been drunk in the last 30 days	37.7	12.0	13.5	5.7	23.8	5.1	12.1	2.8	31.6	10.8
Has indulged in *binge drinking* in the last 30 days	49.4	44.4	33.0	11.4	69.3	15.2	32.1	6.4	39.6	10.1
Has not indulged in *binge drinking* in the last 30 days	36.7	10.8	12.2	5.0	21.4	4.4	10.8	2.5	31.4	10.6
Has indulged in "*botellón*" in the last 30 days	49.9	45.7	33.7	11.3	69.8	15.3	31.1	6.7	39.5	9.0
Has not indulged in "*botellón*" in the last 30 days	38.1	14.2	14.3	5.7	26.5	5.6	13.4	2.9	32.5	10.7

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.14 Nightlife, frequency of nights out and alcohol consumption

When relating the pattern of nights out to alcohol consumption, the extent of alcohol consumption increases with the frequency of nights out (Table 14).

TABLE 14. Prevalence of alcohol use in the last 12 months among Secondary School students aged 14-18, by frequency of nights out in the last 12 months (%). Spain, 2023.

	Alcohol
Never	33.1
Less than one night per month	67.3
1 to 3 nights per month	82.8
1 night per week	85.8
2 nights per week	89.6
3-4 nights per week	90.7
More than 4 nights per week	90.1

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

33.1% of students who have not been out in the last 12 months have drunk alcoholic beverages. This proportion doubles among those who have been out sporadically (67.3%) and becomes the majority among those who have been out at least 1 night a month (82.8% among those who have been out 1 to 3 nights and 90.7% among those who have been out 3-4 nights per week).

4.1.15 Night outings, time of return home and alcohol consumption

On the other hand, the prevalence of alcohol consumption shows that the more time spent on night-life, the higher the consumption.

Thus, alcohol consumption is widespread among students who returned home after 1 a.m. on their last night out: the prevalence of alcohol consumption is between 80% and 90% in the group that returned home between 1 a.m. and 3 a.m., while students who returned home after 3 a.m. have a prevalence of over 90% (Table 15).

TABLE 15. Prevalence of alcohol use in the last 12 months among Secondary School students aged 14-18 according to time of return home (last weekend outing) (%). Spain, 2023.

	Alcohol
Has not gone out	35.3
Before 12 midnight	55.8
Between 12 midnight and 1 a.m.	74.8
Between 1 a.m. and 2 a.m.	80.9
Between 2 a.m. and 3 a.m.	87.2
Between 3 a.m. and 4 a.m.	91.4
Between 4 a.m. and 8 a.m.	95.9
After 8 a.m.	94.0

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.16 Family financial situation and alcohol consumption

When analysing the financial situation of the students' families, it can be seen that there are no notable differences in alcohol consumers compared to the total number of students surveyed (Table 16).

TABLE 16. Family financial situation among Secondary School students aged 14-18, according to alcohol use in the last 30 days. Spain, 2023.

	Total students aged 14-18	Students who have consumed alcohol
Above average	13.2	14.2
About average	82.2	81.2
Below average	4.6	4.5

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.1.17 Alcohol consumption by Autonomous Regions/Cities

This section shows the prevalence of alcohol consumption at Autonomous Region level and in the different time periods analysed. The data show that Extremadura is the Autonomous Region with

the highest prevalence of consumption in all the time periods reflected in the study, while Murcia (excluding Ceuta and Melilla) is the Region with the lowest prevalence of consumption, closely followed by Catalonia.

TABLE 17. Prevalence of alcoholic beverages consumption among Secondary School students aged 14-18 by Autonomous Region/City (%). Spain, 2023.

	Sample size	Lifetime			Last 12 months			Last 30 days		
		Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI
Andalusia	4,021	77.9	76.6	79.2	76.0	74.7	77.3	59.6	58.1	61.1
Aragon	2,251	80.7	79.1	82.3	78.7	77.4	80.4	62.1	60.1	64.1
Asturias	2,015	77.2	75.3	79.0	75.5	74.1	77.4	58.7	56.6	60.9
Balearic Islands	2,207	75.9	74.1	77.7	72.9	71.5	74.8	52.1	50.0	54.1
Canary Islands	2,488	73.2	71.5	75.0	70.4	69.0	72.2	51.3	49.4	53.3
Cantabria	1,865	76.2	74.3	78.2	74.1	72.8	76.1	59.1	56.9	61.4
Castile and Leon	2,574	80.9	79.4	82.4	79.1	77.8	80.7	61.5	59.6	63.3
Castilla la Mancha	2,110	80.0	78.3	81.7	78.1	76.8	79.9	63.2	61.1	65.3
Catalonia	2,675	72.7	71.0	74.3	70.1	68.7	71.9	52.7	50.8	54.6
Valencia	3,636	76.1	74.7	77.5	73.3	72.0	74.8	55.6	54.0	57.2
Extremadura	847	83.0	80.4	85.5	81.1	79.8	83.7	67.9	64.7	71.0
Galicia	2,185	75.4	73.6	77.2	73.7	72.3	75.5	58.8	56.7	60.8
Madrid	3,901	74.8	73.4	76.1	72.4	71.0	73.8	53.2	51.7	54.8
Murcia	2,100	72.5	70.6	74.4	69.8	68.3	71.7	52.4	50.3	54.5
Navarre	2,151	80.1	78.4	81.8	78.1	76.8	79.9	64.1	62.0	66.1
Basque Country	1,184	75.2	72.7	77.6	72.6	71.3	75.2	57.9	55.1	60.7
Rioja	1,586	75.3	73.1	77.4	74.0	72.7	76.2	59.8	57.4	62.2
Ceuta	682	34.4	30.9	38.0	34.0	32.5	37.5	25.3	22.0	28.5
Melilla	1,730	41.2	38.9	43.5	39.5	37.9	41.8	28.6	26.5	30.7
Total	**42,208**	**75.9**	**75.5**	**76.3**	**73.6**	**72.2**	**74.0**	**56.6**	**56.1**	**57.0**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

MAP Nº 1. Prevalence of alcoholic beverages consumption in the last 30 days among Secondary School students aged 14-18 by Autonomous Region/City (%). Spain, 2023.

TABLE 18. Prevalence of alcoholic beverages consumption among Secondary School students aged 14-18 by Autonomous Region/City, by sex (%). Spain, 2023.

	Lifetime		Last 12 months		Last 30 days	
	Men	Women	Men	Women	Men	Women
Andalusia	74.4	81.7	72.4	79.9	56.6	62.9
Aragon	81.1	80.2	78.7	78.8	63.1	60.9
Asturias	73.4	81.5	71.4	80.2	56.0	61.9
Balearic Islands	72.8	78.9	70.0	75.8	48.4	55.6
Canary Islands	70.7	75.8	67.7	73.1	49.0	53.7
Cantabria	73.4	79.1	71.8	76.4	56.2	62.2
Castile and Leon	81.1	80.7	78.8	79.4	60.1	62.8
Castilla la Mancha	78.0	82.1	75.8	80.5	60.8	65.7
Catalonia	70.5	74.8	67.8	72.3	51.3	54.1
Valencia	74.4	77.8	71.0	75.6	53.4	57.8
Extremadura	81.6	84.4	79.7	82.6	68.1	67.6
Galicia	73.8	77.1	72.5	75.0	58.1	59.5
Madrid	72.6	76.8	70.1	74.5	50.0	56.3
Murcia	71.5	73.5	68.9	70.6	51.8	53.0
Navarre	77.6	82.6	75.5	80.8	60.8	67.5
Basque Country	71.5	80.0	67.7	79.1	54.8	61.9
Rioja	74.7	76.0	73.1	75.2	58.6	61.3
Ceuta	35.7	33.4	35.7	32.6	27.2	23.7
Melilla	41.5	40.9	40.3	38.8	29.0	28.3
Total	**73.7**	**78.1**	**71.2**	**76.1**	**54.5**	**58.7**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

If we look at the prevalence of alcohol consumption according to Autonomous Region and sex of the students, in general, women show higher percentages than men, especially in the Basque Country. However, when we look at regular consumption (last 30 days) by region, we find that, together with the Basque Country, the Balearic Islands is the region with the greatest difference in alcohol consumption between the sexes.

With regard to the prevalence of self-reported drunkenness by Autonomous Region, Navarre is the region with the highest lifetime prevalence of drunkenness (58.7%) and in the last 12 months (52.5%), while Extremadura has the highest prevalence of drunkenness in the last 30 days (29.6%).

TABLE 19. Prevalence of self-reported drunkenness among Secondary School students aged 14-18 by Autonomous Region/City (%). Spain, 2023.

	Sample size	Alguna vez en la vida			Últimos 12 meses			Últimos 30 días		
		Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI
Andalusia	4,021	49.5	47.9	51.0	44.1	42.5	45.6	21.5	20.3	22.8
Aragon	2,251	55.5	53.4	57.5	50.2	48.6	52.2	25.1	23.4	26.9
Asturias	2,015	47.7	45.5	49.9	44.0	42.4	46.1	22.4	20.6	24.2
Balearic Islands	2,207	45.6	43.5	47.7	40.7	39.2	42.8	18.6	17.0	20.3
Canary Islands	2,488	39.7	37.7	41.6	33.6	32.2	35.5	14.4	13.0	15.8
Cantabria	1,865	47.6	45.3	49.9	42.4	40.9	44.7	22.9	21.0	24.8
Castile and Leon	2,574	53.4	51.5	55.4	47.8	46.3	49.8	22.5	20.9	24.1
Castilla la Mancha	2,110	53.2	51.1	55.4	46.9	45.3	49.0	23.8	22.0	25.6
Catalonia	2,675	43.7	41.8	45.5	38.2	36.7	40.0	18.8	17.3	20.2
Valencia	3,636	48.3	46.7	49.9	42.8	41.3	44.4	19.4	18.1	20.7
Extremadura	847	53.6	50.3	57.0	48.0	46.5	51.4	29.6	26.5	32.6
Galicia	2,185	46.3	44.2	48.4	42.1	40.5	44.1	23.3	21.5	25.0
Madrid	3,901	47.6	46.0	49.1	42.0	40.5	43.6	20.0	18.7	21.2
Murcia	2,100	42.4	40.3	44.5	37.2	35.7	39.3	17.0	15.4	18.7
Navarre	2,151	58.7	56.6	60.7	52.5	50.9	54.6	29.4	27.5	31.3
Basque Country	1,184	45.0	42.1	47.8	41.3	39.8	44.1	24.7	22.2	27.1
Rioja	1,586	50.0	47.5	52.5	46.0	44.5	48.5	23.8	21.7	25.9
Ceuta	682	15.1	12.4	17.8	13.3	12.3	15.9	5.6	3.9	7.3
Melilla	1,730	19.8	17.9	21.7	16.3	15.2	18.0	7.5	6.3	8.7
Total	**42,208**	**47.5**	**47.0**	**48.0**	**42.1**	**40.6**	**42.6**	**20.8**	**20.4**	**21.2**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

TABLE 20. Prevalence of self-reported drunkenness among Secondary School students aged 14-18 by Autonomous Region/City, by sex (%). Spain, 2023.

	Lifetime		Last 12 months		Last 30 days	
	Men	Women	Men	Women	Men	Women
Andalusia	45.5	53.9	41.1	47.3	20.7	22.4
Aragon	55.2	55.7	51.2	49.0	25.9	24.3
Asturias	44.0	52.0	40.5	47.9	22.0	22.8
Balearic Islands	40.3	50.7	36.4	44.9	15.7	21.5
Canary Islands	36.5	42.8	32.0	35.3	13.3	15.5
Cantabria	42.9	52.4	37.5	47.4	21.2	24.6
Castile and Leon	51.9	54.9	46.9	48.7	22.6	22.4
Castilla la Mancha	49.8	56.8	45.0	48.8	24.8	22.8
Catalonia	39.1	48.0	34.2	41.9	17.3	20.2
Valencia	44.0	52.5	37.9	47.7	17.5	21.3
Extremadura	55.0	52.1	48.9	47.1	31.1	27.9
Galicia	45.2	47.4	41.5	42.7	22.8	23.7
Madrid	43.4	51.5	39.1	44.8	17.5	22.3
Murcia	39.0	45.8	35.1	39.3	16.7	17.4
Navarre	54.2	63.2	48.9	56.1	29.1	29.7
Basque Country	40.0	51.4	36.3	47.7	22.2	27.9
Rioja	48.2	52.2	44.3	48.1	24.1	23.4
Ceuta	13.9	16.0	11.7	14.6	5.7	5.5
Melilla	18.0	21.3	15.5	16.9	8.3	6.8
Total	**43.9**	**51.2**	**39.3**	**45.1**	**19.7**	**21.9**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

On the other hand, the prevalence of self-reported drunkenness is more frequent among girls than among boys in all Autonomous Regions except Aragón and Extremadura, where the opposite is true.

As for *binge drinking*, Navarre and Extremadura are the Autonomous Regions where it is most common, while the Canary Islands, Catalonia and Madrid, apart from Ceuta and Melilla, are the Autonomous Regions where it is not so common.

TABLE21. Prevalence of *binge drinking* in the last 30 days among Secondary School students aged 14-18 by Autonomous Region/City, by sex (%). Spain, 2023.

	Sample size	Total	Men	Women
Andalusia	4,021	30.3	31.5	29.0
Aragon	2,251	34.4	36.4	32.0
Asturias	2,015	28.7	28.3	29.2
Balearic Islands	2,207	26.0	25.0	27.0
Canary Islands	2,488	23.5	23.5	23.6
Cantabria	1,865	28.6	27.4	29.8
Castile and Leon	2,574	31.3	32.7	29.8
Castilla la Mancha	2,110	34.3	36.5	32.0
Catalonia	2,675	24.2	24.8	23.5
Valencia	3,636	27.4	26.4	28.4
Extremadura	847	39.0	40.7	37.2
Galicia	2,185	29.4	30.7	28.0
Madrid	3,901	25.0	23.2	26.6
Murcia	2,100	25.7	26.8	24.6
Navarre	2,151	39.3	37.0	41.7
Basque Country	1,184	32.4	31.2	33.9
Rioja	1,586	32.3	35.1	28.9
Ceuta	682	7.5	10.2	5.4
Melilla	1,730	7.2	8.6	6.1
Total	**42,208**	**28.2**	**28.6**	**27.8**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

MAP Nº 2. Prevalence of binge drinking in the last 30 days among Secondary School students aged 14-18 by Autonomous Region/City (%). Spain, 2023.

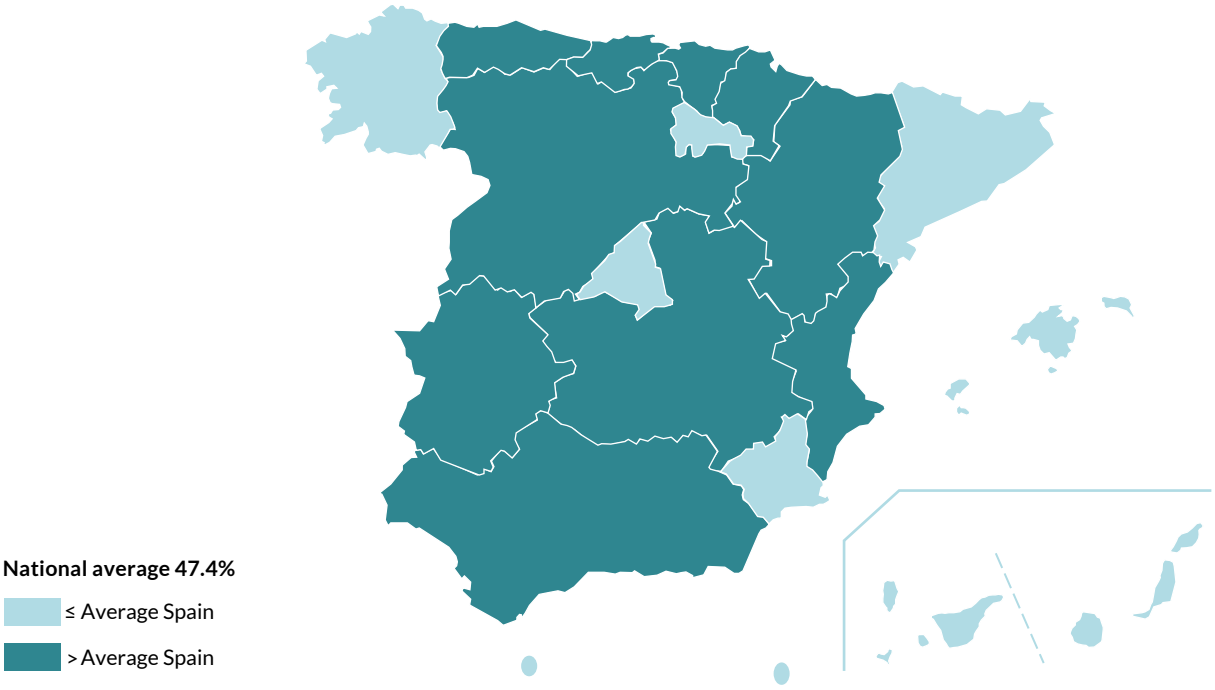
Regarding participation in *botellón*, Extremadura and Castilla La Mancha are the Autonomous Regions where this practice is most common, and the Canary Islands, Ceuta and Melilla are the Autonomous Regions where it is least common.

TABLE 22. Prevalence of participation in *botellón* among Secondary School students aged 14-18 by Autonomous Region/City, by sex (%). Spain, 2023.

	Sample size	Last 12 months			Last 30 days		
		Total	Men	Women	Total	Men	Women
Andalusia	4,021	50.5	47.5	53.9	22.0	22.2	21.8
Aragon	2,251	51.3	51.1	51.5	19.2	20.1	18.2
Asturias	2,015	47.5	43.3	52.4	19.5	18.4	20.7
Balearic Islands	2,207	38.5	37.6	39.4	13.8	13.0	14.5
Canary Islands	2,488	28.6	27.0	30.1	10.5	9.6	11.5
Cantabria	1,865	52.9	47.4	58.6	32.2	28.3	36.2
Castile and Leon	2,574	52.6	50.0	55.0	18.0	17.2	18.7
Castilla-La Mancha	2,110	56.3	55.2	57.4	29.3	28.0	30.6
Catalonia	2,675	45.0	42.1	47.7	17.0	16.2	17.8
Valencia	3,636	47.8	44.7	50.8	18.1	15.5	20.6
Extremadura	847	68.9	67.6	70.2	41.5	43.3	39.6
Galicia	2,185	46.5	44.5	48.8	22.4	21.8	23.0
Madrid	3,901	45.4	42.6	48.0	15.5	13.5	17.4
Murcia	2,100	44.9	44.2	45.6	18.0	18.6	17.4
Navarre	2,151	50.3	48.2	52.5	20.0	21.4	18.6
Basque Country	1,184	49.0	43.6	56.1	27.6	23.8	32.5
Rioja	1,586	44.7	43.7	46.0	16.8	17.5	16.0
Ceuta	682	14.4	14.9	14.0	7.3	8.2	6.6
Melilla	1,730	20.5	20.3	20.6	7.0	7.9	6.3
Total	**42,208**	**47.4**	**44.8**	**50.0**	**19.7**	**18.9**	**20.5**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

MAP Nº 3. Prevalence of participation in *botellón* in the last 12 months among Secondary School students aged 14-18 by Autonomous Region/City (%). Spain, 2023.



As for the consumption of stimulant beverages with high caffeine content mixed with alcohol, in general, it is somewhat more frequent in coastal regions than in inland regions.

TABLE 23. Prevalence of consumption of stimulant beverages with high caffeine content mixed with alcohol in the last 30 days among Secondary School students aged 14-18 by Autonomous Region/City, by sex (%). Spain, 2023.

	Sample size	Total	Men	Women
Andalusia	4,021	19.5	21.0	17.9
Aragon	2,251	19.6	22.7	15.9
Asturias	2,015	22.6	21.9	23.5
Balearic Islands	2,207	22.8	21.3	24.3
Canary Islands	2,488	17.5	18.2	16.8
Cantabria	1,865	21.9	23.7	20.0
Castile and Leon	2,574	17.4	18.7	16.0
Castilla la Mancha	2,110	18.1	18.5	17.7
Catalonia	2,675	22.5	24.2	20.8
Valencia	3,636	20.4	21.1	19.8
Extremadura	847	18.3	21.1	15.1
Galicia	2,185	22.0	23.8	20.0
Madrid	3,901	14.8	15.0	14.5
Murcia	2,100	19.8	22.4	17.1
Navarre	2,151	17.1	19.4	14.7
Basque Country	1,184	21.8	24.3	18.8
Rioja	1,586	21.8	22.5	20.9
Ceuta	682	15.0	17.5	13.0
Melilla	1,730	13.3	14.1	12.6
Total	**42,208**	**19.5**	**20.8**	**18.2**

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2 Pilot study on the use of alcohol, tobacco and behavioural addictions in Secondary School students of 1st and 2nd years of Compulsory Secondary Education (ESO) (12 and 13 years old) in Spain (ESTUDES 2023-1st and 2nd ESO)

In 2023, the ESTUDES survey on Secondary School students included as a novelty the simultaneous implementation of a *Pilot study on the use of alcohol, tobacco and behavioural addictions in Secondary School students of 1st and 2nd ESO (12 and 13 years old) in Spain (ESTUDES 2023-1st and 2nd ESO)*. This pilot study, which extended the sample frame of the ESTUDES survey to these age groups, is included in the Action Plan on Addictions 2021/2024 of the National Strategy on Addictions 2017-2024, within the Transversal Area 2 "Knowledge Management", in Action 3 "New developments in the Information System". The pilot study on 12- and 13-year-old students shares objectives with ESTUDES, as well as a large part of the questionnaire, although it does not include all the questions asked in the ESTUDES survey due to the fact that it was adapted to the reference public. Therefore, all questions referring to illicit drug use were excluded from the study.

The pilot survey was conducted nationwide and data collection took place from 5th February to 28th May 2023, with a final valid sample of 8,023 students.

The pilot study among 12- and 13-year-old students included questions on alcohol use and the results are shown below.

4.2.1 Consumption of alcoholic beverages.

34.6% of students aged 12 and 13 in the 1st and 2nd years of ESO recognise having consumed alcohol **at least once in their life**. By sex, a similar prevalence is observed between boys and girls for the consumption of this substance within this age range, however, by age, it is observed that the presence of those who have at least tried it is considerably higher among 13-year-olds (41.5%) than among 12-year-olds (26.9%). Comparing this figure with students aged 14 to 18, the prevalence among these older students is more than double, at 75.9% (Table 24).

TABLE 24. Prevalence of alcoholic beverages consumption among Secondary School students aged 14-18, by sex and age (%). Spain, 2023.

	LIFETIME	
	12-13 years old	**14-18 years old**
Total	**34.6**	**75.9**
Sex		
Men	34.7	73.7
Women	34.6	78.1
Age		
12 years old	26.9	-
13 years old	41.5	-
	LAST 12 MONTHS	
	12-13 years old	**14-18 years old**
Total	**30.6**	**73.6**
Sex		
Men	30.3	71.2
Women	30.9	76.1
Age		
12 years old	22.6	-
13 years old	37.7	-
	LAST 30 DAYS	
	12-13 years old	**14-18 years old**
Total	**21.5**	**56.6**
Sex		
Men	22.3	54.5
Women	20.6	58.7
Age		
12 years old	16.1	-
13 years old	26.2	-

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

With respect to the **last 12 months**, the prevalence of alcohol consumption is observed to decrease by 4%, standing at 30.6% for students aged 12 and 13. For this time period, a similar extent of consumption is again observed between boys and girls for this substance. Age is again a determining factor, with the proportion of users rising by 15.1% from 12 to 13 years old (22.6% and 37.7%, respectively). Comparing the results with those of the ESTUDES survey, it can be observed that among 14–18-year-olds, the drop in lifetime prevalence use is smaller (2.3%), standing at 73.6 %.

Regarding the time period of the **last 30 days**, the proportion of students in the first cycle of ESO who recognise having taken this substance stands at 21.5%, which represents a difference of 9.1% with respect to the last 12 months. In terms of sex, there is a slightly higher presence of consumers among boys (22.3%) than among girls (20.6%). This situation is reversed in the 14-18 age group where alcohol consumption for all time periods is more prevalent among girls (Table 25). The age of the students is related to the prevalence of past-month consumption, at 16.1% among 12-year-olds, rising to 26.2% among 13-year-olds and more than doubling among students aged 14-18 (56.6%).

TABLE 25. General characteristics of alcoholic beverages consumption among Secondary School students aged 14-18, by sex and age (%). Spain, 2023.

	12-13 years old		14-18 years old	
	Men	Women	Men	Women
Number of survey respondents	4,067	3,956	21,247	20,961
Prevalence of lifetime alcohol consumption	34.7	34.6	73.7	78.1
Prevalence of alcohol consumption in the last 12 months	30.3	30.9	71.2	76.1
Prevalence of alcohol consumption in the last 30 days	22.3	20.6	54.5	58.7

M=Men, W=Women

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.2 Acute alcohol intoxication. Self-reported drunkenness.

7.2% of 12 and 13-year-old pupils in the first and second years of Compulsory Secondary Education (ESO) report having been drunk at some time in their lives, with 5.8% having done so in the last year. In relation to the last month, the prevalence of acute alcohol intoxication among these pupils decreases to 1.9% (Table 26).

Looking at **sex**, the prevalence of acute alcohol intoxication among students aged 12-13 is higher among girls than among boys, both in the lifetime time period (8.2% vs. 6.2% among boys) as well as in the last 12 months (6.7% vs. 4.9% among boys). The same phenomenon is observed in the ESTUDES survey among students aged 14-18, where self-reported drunkenness is also more prevalent among girls.

In terms of **age**, the prevalence of acute alcohol intoxication increases with age, irrespective of the time period analysed. In the case of lifetime, the prevalence of self-reported drunkenness among 13-year-olds is three times higher than among 12-year-olds (3.5%). For the past 12 months, the proportion of self-reported drunkenness among 13-year-olds is close to four times higher than among 12-year-olds (8.8% vs. 2,3%).

Comparing the figures with those obtained in the ESTUDES survey among 14–18-year-olds confirms the impact of age on the prevalence of acute alcohol intoxication, with a qualitative leap in 14–18-year-olds, where almost 50% admit to having been drunk at some time, 42.1% in the last 12 months and 20.8% in the last 30 days.

TABLE 26. Prevalence of acute alcohol intoxication (self-reported drunkenness) among Secondary School students, by sex and age (%). Spain, 2023.

	Lifetime		Last 12 months		Last 30 days	
	12-13 years old	14-18 years old	12-13 years old	14-18 years old	12-13 years old	14-18 years old
Total	**7.2**	**47.5**	**5.8**	**42.1**	**1.9**	**20.8**
Men	6.2	43.9	4.9	39.3	1.7	19.7
Women	8.2	51.2	6.7	45.1	2.0	21.9
12 years old	3.5	-	2.3	-	0.5	-
13 years old	10.5	-	8.8	-	3.1	-

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.3 Places where alcohol is procured and consumed

Regarding the **places** most frequently chosen by 12- and 13-year-old students **to purchase alcoholic beverages** in the last 30 days (Table 27), the most common are convenience stores, Chinese shops, kiosks, bodegas (41.6%), followed by other people's houses (40.8%). On the other hand, street vendors and the Internet are the least common places. By sex, it is observed that, in the case of boys, the house where they live stands out as the most common place to obtain, surpassing convenience stores and other people's houses.

On the other hand, within the same period of the last 30 days, among the most common **places to consume** these drinks, streets, squares, parks, beaches or open public spaces were the most frequently mentioned by students (39.3%). This is followed by other people's houses (35.1%) and the house where the pupil lives (31.5%). By sex, it can be seen that streets, squares or open spaces are used more by girls than by boys, and the same applies to the house where the boy lives.

TABLE 27. Places where Secondary School students aged 12 and 13 have bought or obtained and where they have consumed alcoholic beverages in the last 30 days, by sex (%). Spain, 2023.

	Bought/Obtained			Consumed		
	Total	Men	Women	Total	Men	Women
Supermarkets	**29.5**	27.2	31.3	-	-	-
Bars or pubs	**18.8**	20.4	17.5	**16.8**	18.7	15.2
Clubs	**14.2**	16.7	12.2	**15.2**	18.5	12.6
Convenience stores, Chinese shops, kiosks, bodegas	**41.6**	37.1	45.2	-	-	-
Hypermarkets	**10.6**	12.1	9.3	-	-	-
Other people's houses	**40.8**	36.2	44.5	**35.1**	34.9	35.3
House where you live	**33.2**	38.2	29.1	**31.5**	35.1	28.7
Internet	**3.2**	4.6	2.1	-	-	-
Street vending	**5.8**	7.9	4.1	-	-	-
In streets, squares, parks, beaches or open public spaces	-	-	-	**39.3**	31.2	45.6

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

If a comparison is made between students aged 12 and 13 and those aged 14 to 18 (Table 28), it can be seen that there is a big difference in the places where alcohol is purchased. Among 14- to 18-year-olds, bars or pubs and supermarkets are the main places to buy alcohol, surpassing convenience stores, Chinese shops, kiosks or bodegas, which, as mentioned above, were the main places for 12–13-year-olds. Other people's houses and houses where pupils themselves live are more relevant for 12–13-year-olds.

TABLE 28. Places where Secondary School students have bought or obtained alcoholic beverages in the last 30 days, by age (%). Spain, 2023.

	Bought/Obtained	
	12-13 years old	14-18 years old
Supermarkets	29.5	54.1
Bars or pubs	18.8	54.9
Clubs	14.2	46.3
Convenience stores, Chinese shops, kiosks, bodegas	41.6	49.4
Hypermarkets	10.6	22.0
Other people's houses	40.8	36.0
House where you live	33.2	27.8
Internet	3.2	2.3
Street vending	5.8	4.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

Analysing the **way of obtaining alcoholic beverages** by students aged 12 and 13 (Table 29), it can be seen that 45.4% reported having acquired alcoholic beverages through other people aged 18 or older, this being the main channel.

Looking at **sex**, both boys and girls report that the main way of obtaining alcohol is from other people of legal age. However, it is observed that among girls, obtaining alcohol through other underage persons is more relevant than among boys, while a higher proportion of boys report obtaining alcohol through other methods that they do not specify.

TABLE 29. Ways in which Secondary School students aged 12 and 13 have bought or obtained alcoholic beverages in the last 30 days, by sex (%). Spain, 2023.

	Total		
	Total	Men	Women
By themselves	**25.1**	23.5	26.3
Through other persons 18 years old or older	**45.4**	44.6	46.1
Through other persons under 18 years old	**23.4**	18.8	27.0
Other	**23.7**	30.3	18.7

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.4 Participation in botellón (gathering in public spaces to drink store bought alcohol)

8.3% of students aged 12 and 13 admit to having participated in *botellón* in the last 12 months, a proportion that drops to less than half when the time period is adjusted to the last month (3.1%).

Analysing the prevalence of participation in *botellón* by sex, it can be seen that, as with self-reported drunkenness, it is somewhat higher among girls than among boys.

In terms of age, the proportion of students who admit to having participated in *botellón* increases threefold between the ages of 12 and 13 in the last 12 months (from 3.7% to 12.4%), and fivefold in the last month (from 1.0% to 4.9%) (Table 30).

TABLE 30. Prevalence of participation in *botellón* in the last 12 months and last 30 days among Secondary School students aged 12 and 13, by sex and age (%). Spain, 2023.

	Botellón in the last 12 months	*Botellón* in the last 30 days
Total	**8.3**	**3.1**
Sex		
Men	7.3	2.6
Women	9.3	3.6
Age		
12 years old	3.7	1.0
13 years old	12.4	4.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.5 Alcohol use in the family (parents)

Taking into account the alcohol consumption of parents to analyse the prevalence of alcohol consumption among 12- and 13-year-old students, it is observed that there is a direct relationship between the two (Table 31). In all time periods and for all types of consumption analysed, prevalence rates among students generally increase as parental alcohol use becomes more frequent. This is shown by the fact that 49.7% of students aged 12 and 13 whose mother abuses alcohol every day or almost every day have tried alcohol, and this proportion rises to 62.2% in cases where it is the father who has an abuse problem for this substance.

TABLE 31. Prevalence of alcohol consumption among Secondary School students aged 12 and 13 according to their parents' alcohol consumption (%) Spain, 2023.

		Students from 12 to 13 years old				
		Alcohol Lifetime	Alcohol L12M	Drunkenness L12M	*Botellón* L12M	*Binge* L30D
Mother	Not drank on any day	28.3	24.5	5.0	6.6	4.9
	Drank on a single day	35.2	30.9	6.1	8.6	6.6
	Drinking only on weekends	39.0	35.1	6.4	10.3	7.9
	Drank moderately every day or almost every day	44.8	40.8	7.0	11.0	6.7
	Abused alcohol every day or almost every day	49.7	49.7	17.3	23.9	19.6
Father	Not drank on any day	25.9	22.8	4.9	6.0	4.5
	Drank on a single day	32.2	28.5	5.3	7.4	6.1
	Drinking only on weekends	38.9	34.9	6.0	9.8	6.9
	Drank moderately every day or almost every day	40.3	37.3	8.0	12.5	7.8
	Abused alcohol every day or almost every day	62.2	48.8	19.7	13.3	13.9

L12M: In the last 12 months; L30D: In the last 30 days

Binge: Binge drinking

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

In this way, it is worth noting that 40.8% of students who recognise that their father has consumed alcohol on a daily basis have had an alcoholic drink in the last year, a proportion that is double that of students whose fathers have not had a drink at all.

4.2.6 Risk perception

Risk perception allows us to determine the extent to which students think that a certain behaviour may cause problems (Table 32).

In the case of alcohol, the majority of 12- and 13-year-old students are convinced of the risk associated with **drinking 5 or 6 beers/drinks at the weekend**: 71.2% recognise that this behaviour can cause a lot or a fair amount of problems. Compared to the ESTUDES data, among students aged 14-18, the

presence of those who consider that weekend drinking can cause a lot or a fair amount of problems decreases by 7.8% (63.4%).

At the other end of the spectrum, we find a much more polarised opinion among 12- and 13-year-old students about the problems associated with **drinking 1 or 2 beers/drinks daily**: 58.9% of students identify this as a problem behaviour. Comparing this result with that obtained in the ESTUDES survey, it can be seen that, in contrast to weekend drinking, the risk perception of daily drinking is higher among 14–18-year-olds by 4.7%. This shows the need to continue to raise awareness among young people about the consequences of consuming any amount of alcohol and to be able to have an element of deterrence when students consider starting to drink alcohol.

TABLE 32. Secondary School students' perceived risk of regular drinking (percentage of students who think that regular drinking, once a week or more often, can cause a lot or a fair amount of problems). Spain, 2023.

	12-13 years old	14-18 years old
Drinking 5 or 6 beers/drinks on weekends	71.2	63.4
Drinking 1 or 2 beers/glasses daily	58.9	63.6

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.7 Perception of availability

The feeling that it is easy to get alcoholic beverages is what is known as the perceived availability of alcohol (Table 33).

More than half of 12- and 13-year-old students consider that it would be easy or very easy for them to get alcoholic beverages if they wanted to (52.2%).

As would be expected given the direct relationship between the extent of alcohol consumption and the age of Secondary School students, among 14- and 18-year-olds the presence of those who consider that it would be easy or very easy for them to buy alcoholic beverages increases exponentially to 92.9%.

TABLE 33. Perceived availability of alcohol among Secondary School students (percentage of students who think it would be relatively easy or very easy for them to obtain alcohol if they wanted to) (%). Spain, 2023.

	12-13 years old	14-18 years old
Alcohol	52.2	92.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.8 Leisure activities and alcohol consumption

Analysing alcohol consumption in the last 12 months according to the leisure activities undertaken by 12- and 13-year-old students (Table 34), it can be observed that going out at night is what marks the greatest differences in the prevalence of consumption: 50.9% of those who have been out admit to having consumed alcohol, compared to 20.8% among those who have not been out.

Although to a lesser extent, going out in the evenings with friends also has some influence on the extent of drinking. Thus, we find a higher proportion of those who have consumed alcohol among those who go out in the evenings (31.8%) than among those who have not (19.0%).

On the other hand, it is worth noting that students who do not read books for fun have a higher prevalence of alcohol consumption. The same is true for those who have no other hobbies.

TABLE 34. Prevalence of alcohol use in the last 12 months among Secondary School students aged 12-13 by leisure activities (%). Spain, 2023.

	Alcohol
Has played any sport	30.1
Has not played any sport	33.8
Has read books for fun	25.7
Has not read books for fun	41.4
Has been out with friends in the evenings	31.8
Has not been out with friends in the evenings	19.0
Has been out with friends at night	50.9
Has not been out with friends at night	20.8
Has other hobbies	26.9
Does not have other hobbies	35.9

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

4.2.9 Family financial situation

80.9% of 12- and 13-year-old students think that their family's financial situation is more or less the same as that of the average. 16.1% indicate that it is above average and only 3.0% think that their family's financial situation is worse than average (Table 35).

TABLE 35. Family financial situation among Secondary School students aged 12-13, according to alcohol use in the last 12 months. Spain, 2023.

	Total students 12-13 years old	Students 12-13 years old who have consumed alcohol
Above average	**16.1**	19.1
About average	**80.9**	77.4
Below average	**3.0**	3.4

SOURCE: OEDA. Survey on Drug Use in Secondary Education in Spain (ESTUDES).

The perception of their family's financial situation is similar among students who have admitted to having consumed alcohol in the last year and among students in general. However, the proportion of students who consider their family's financial situation to be above average is somewhat higher among those who report having consumed alcohol in the last year.

4.3 Survey on Alcohol and other Drugs in Spain (EDADES 2022)

The Survey on Alcohol and Drugs in Spain (EDADES) is a nationwide survey that has been carried out every two years since 1995 and is promoted and financed by the DGPNSD with the collaboration of the Autonomous Regions and Cities. In 2022, the survey was carried out on 26,344 persons aged between 15 and 64 years old, resident in households throughout the Realm.

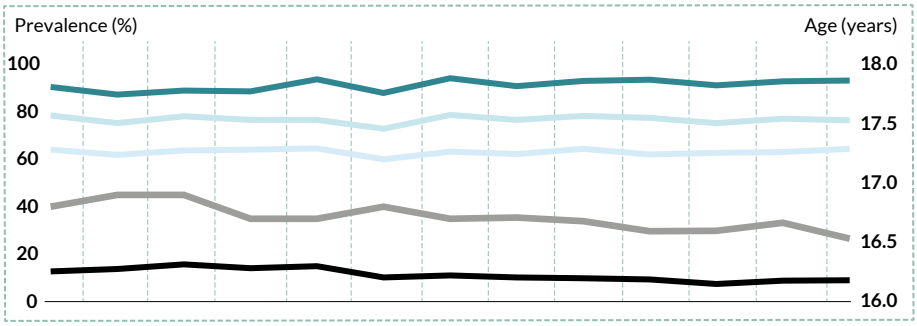
The results obtained with respect to the consumption of alcoholic beverages are detailed below.

4.3.1 Prevalence of alcohol consumption

In 2022, 93.2% of the population aged 15-64 report having consumed alcoholic beverages in their lifetime (Figure 8).

Since 2009, the prevalence rate for this time period has exceeded 90%. Looking at alcohol consumption in the last year, around 76% report having drunk alcohol at some point in the last 12 months prior to the survey, a figure that has decreased compared to the figure recorded in 2019.

FIGURE 8. Prevalence of alcoholic beverages consumption (%) and average age of onset of use (years) in the population aged 15-64. Spain, 1997-2022.



	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2018	2020	2022
Lifetime	90.6	87.3	89.0	88.6	93.7	88.0	94.2	90.9	93.1	93.5	91.2	93.0	93.2
Last 12 months	78.5	75.2	78.1	76.6	76.7	72.9	78.7	76.6	78.3	77.6	75.2	77.2	76.4
Last 30 days	64.0	61.8	63.7	64.1	64.6	60.0	63.3	62.3	64.4	62.1	62.7	63.0	64.5
Daily in the last 30 days	12.7	13.7	15.7	14.1	14.9	10.2	11.0	10.2	9.8	9.3	7.4	8.8	9.0
Average age of onset of use	16.8	16.9	16.9	16.7	1.7	16.8	16.7	16.7	16.7	16.6	16.6	16.7	16.5

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

The prevalence of alcohol consumption in the last month stands at 64.5%, an increase of 1.5% compared to the previous measurement. Finally, 9% of the Spanish population reported daily alcohol consumption.

4.3.2 Average age of onset of use

The EDADES 2022 survey shows that, on average, the age at which alcohol was first consumed was 16.5 years old. This value is slightly lower than that observed throughout the historical series (Figure 8). Moreover, males started drinking earlier (at 16 years old) than females (at 17 years old).

Regarding sex, irrespective of time and age group, alcohol consumption is more widespread among males than among females (Table 36).

TABLE 36. Prevalence of alcoholic beverages consumption in the population aged 15-64, by sex and age (%). Spain, 2022.

	15-64 years old			15-24 years old			25-34 years old			35-44 years old			45-54 years old			55-64 years old		
	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W
Lifetime	93.2	94.9	91.4	85.3	85.7	84.9	94.7	96.5	92.8	94.2	95.9	92.6	94.9	96.7	93.2	94.5	97.5	91.6
Last 12 months	76.4	82.1	70.8	76.2	77.3	75.1	81.1	86.4	75.8	77.0	84.0	70.1	76.5	82.5	70.4	72.0	79.5	64.7
Last 30 days	64.5	73.1	55.7	62.7	65.2	60.0	68.2	75.8	60.5	65.1	75.6	54.7	64.8	74.3	55.2	61.6	72.8	50.7
Daily in the last 30 days	9.0	14.6	3.5	1.3	1.9	0.7	4.7	7.4	1.9	8.1	12.8	3.5	11.1	18.1	4.0	16.8	27.6	6.1
Never	6.8	5.1	8.6	14.7	14.3	15.1	5.3	3.5	7.2	5.8	4.1	7.4	5.1	3.3	6.8	5.5	2.5	8.4

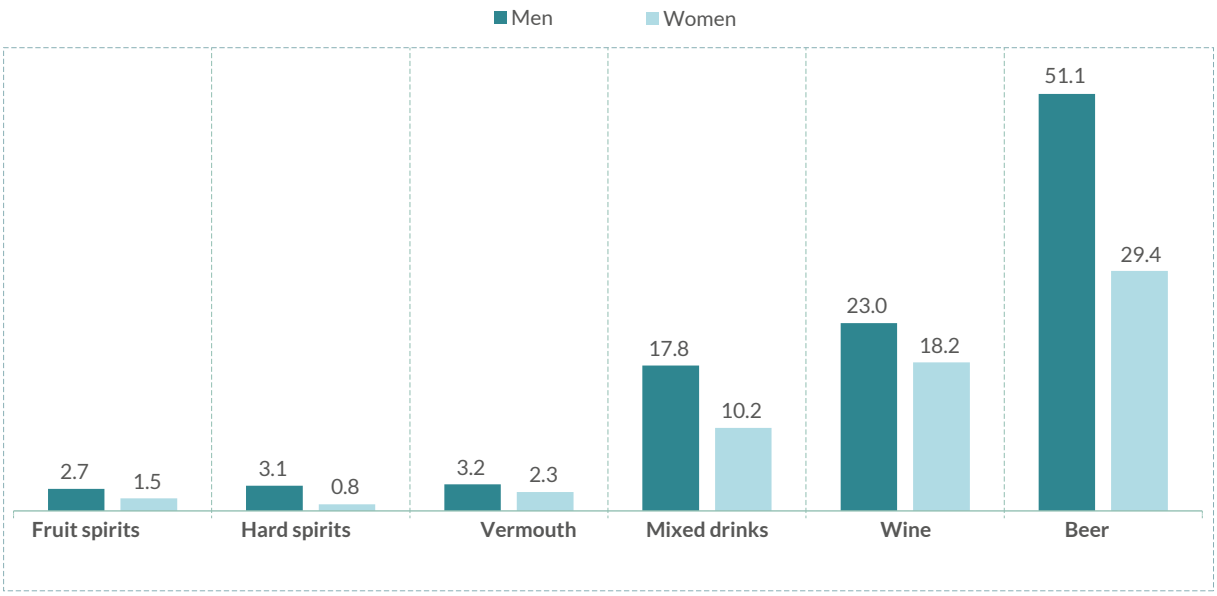
T: Total; M: Men; W: Women

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

By age, the highest prevalence of past 30-day use is found among 25–34-year-olds, irrespective of the sex of the individual. However, in the case of daily consumption, the highest number of consumers is found in the 55+ age group.

Regarding the **type of beverage** consumed, there is a large difference in the prevalence of consumption between men and women, regardless of the type of beverage consumed, with the greatest difference being seen in the case of beer and mixed drinks (Figure 9). Beer is the type of drink most consumed by both men and women, but men consume almost twice as much as women.

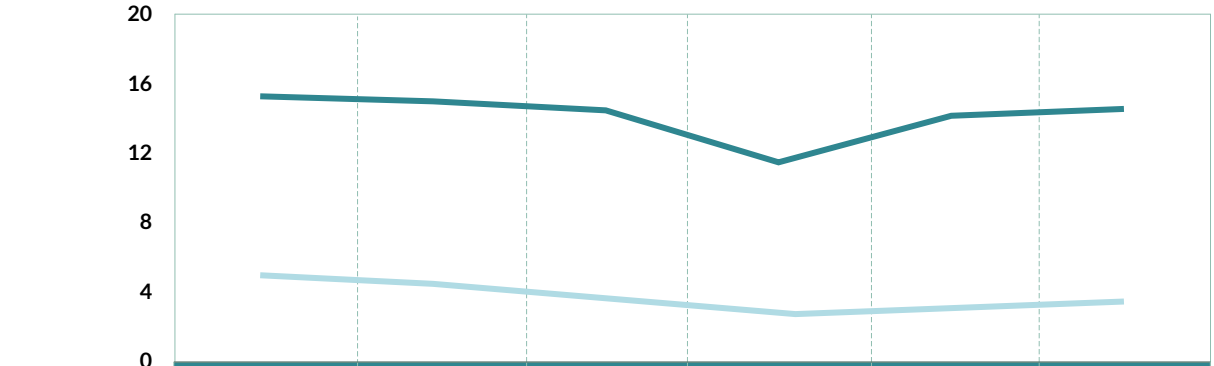
FIGURE 9. Prevalence of alcoholic beverages consumption in the last 7 days among the population aged 15-64, by type of alcoholic beverage consumed and by sex (%). Spain, 2022.



SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

In terms of daily consumption, it can be observed that throughout the entire historical series, it is men who consume alcohol on a daily basis to a greater extent (Figure 10).

FIGURE 10. Prevalence of daily alcohol consumption (%) in the last 30 days among the population aged 15-64, by sex (%). Spain, 2011-2022.



	2011	2013	2015	2018	2020	2022
Men	15.3	15.0	14.5	11.5	14.2	14.6
Women	5.0	4.5	4.1	3.3	3.4	3.5

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

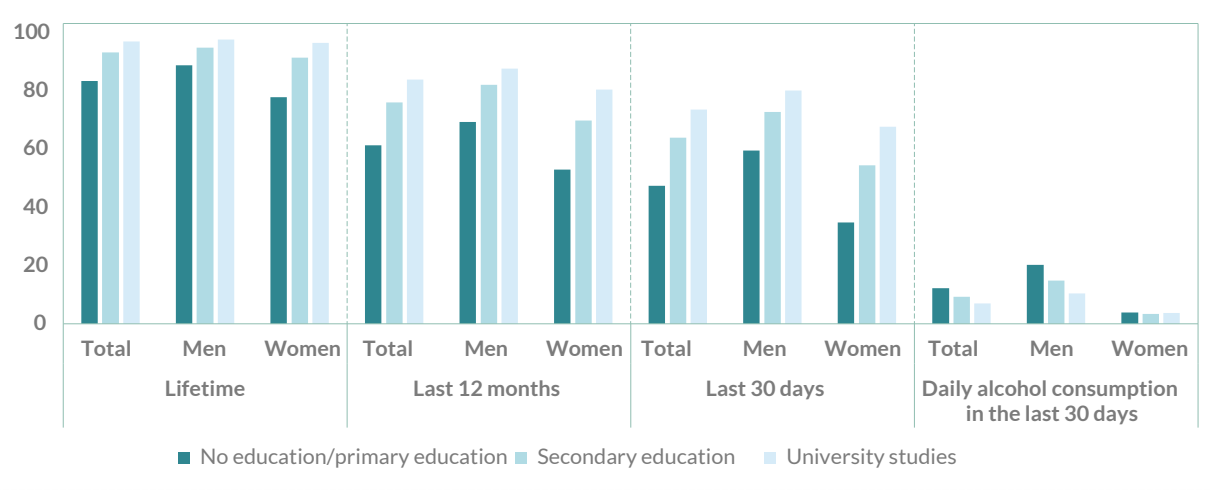
With regard to alcohol consumption according to **educational level**, in both men and women, the prevalence of alcohol consumption in all time periods is higher as the level of education increases, except for daily consumption, which, on the contrary, is more frequent the lower the level of education (Table 37 and Figure 11). However, these data should be read with caution as the lower educational level group includes a higher percentage of people in the older age group, who in turn have a higher frequency of daily use patterns.

TABLE 37. Prevalence of alcoholic beverages consumption among the population aged 15-64, by highest level of education completed or passed (%). Spain, 2022.

Alcohol consumption	No education/primary education	Secondary education	University studies
Lifetime	83.6	93.3	97.2
Last 12 months	61.4	76.2	84.0
Last 30 days	47.5	63.9	73.6
Daily consumption	12.2	9.2	6.9

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

FIGURE 11. Prevalence of alcoholic beverages consumption among the population aged 15-64, by highest level of education completed or passed and by sex (%). Spain, 2022.



SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.3 Alcohol consumption in pregnancy

From 2017, in order to explore alcohol consumption during pregnancy, the following question was included in the EDADES questionnaire: "If you have been PREGNANT or are currently pregnant, have you consumed or do you consume any alcoholic beverages during pregnancy?".

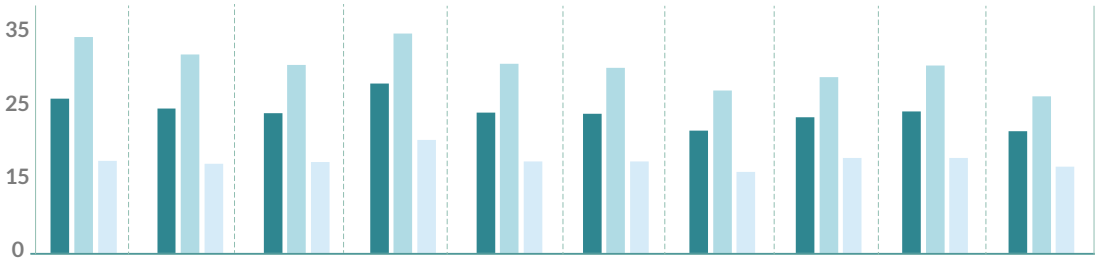
In 2022, 1.6% of women reported drinking alcohol while pregnant, higher than in 2020 (1.2%).

4.3.4 Acute alcohol intoxication (self-reported drunkenness)

The prevalence of acute alcohol intoxication in the last 12 months stands at 16.7%, a significant decrease compared to the previous survey and thus breaking the upward trend started in 2015 (Figure 12).

By sex, regardless of age group, self-reported drunkenness is more prevalent among men than among women. **In terms of age**, and irrespective of sex, the prevalence of self-reported drunkenness decreases as age increases (Figures 13 and 14).

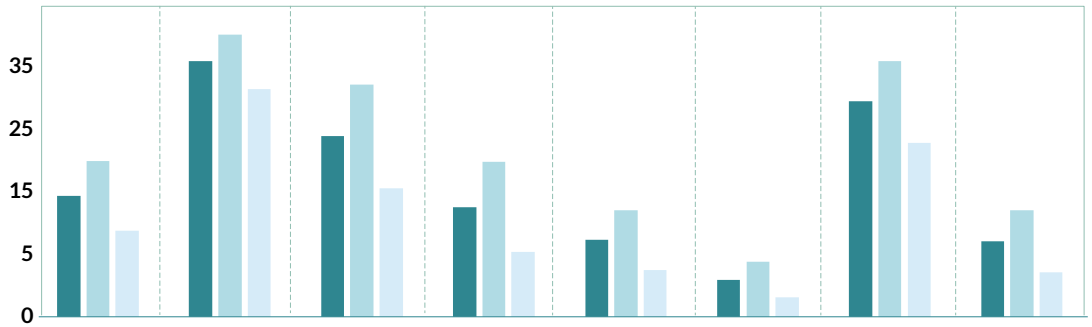
FIGURE 12. Prevalence of acute alcohol intoxication (drunkenness) in the last 12 months in the population aged 15-64 years old, by sex (%). Spain, 2003-2022.



	2003	2005	2007	2009	2011	2013	2015	2018	2020	2022
Total	21.2	19.8	19.2	23.2	19.3	19.1	16.8	18.6	19.4	16.7
Men	29.6	27.2	25.8	30.5	25.9	25.4	22.3	24.1	25.7	21.5
Women	12.7	12.3	12.5	15.5	12.6	12.6	11.2	13.1	13.1	11.9

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

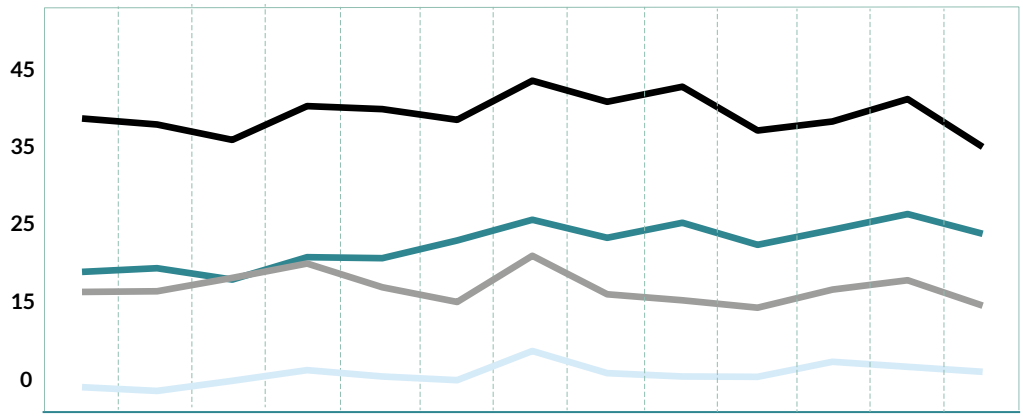
FIGURE 13. Prevalence of acute alcohol intoxication (drunkenness) in the last 12 months among the population aged 15-64, by sex and age (%). Spain, 2022.



	15-64 years old	15-24 years old	25-34 years old	35-44 years old	45-54 years old	55-64 years old	15-34 years old	35-64 years old
Total	16.7	35.3	25.0	15.1	10.6	5.1	29.8	10.4
Men	21.5	39.0	32.1	21.5	14.7	7.6	35.4	14.7
Women	11.9	31.4	17.8	8.9	6.5	2.7	24.1	6.1

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

FIGURE 14. Prevalence of acute alcohol intoxication (drunkenness) in the last 12 months among the population aged 15-64, by sex and age (%). Spain, 1997-2022.



	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2018	2020	2022
Men 15 to 34 years old	39.1	38.3	36.3	40.7	40.3	38.9	44.0	41.3	43.2	37.5	38.7	41.6	35.4
Women 15 to 34 years old	19.1	19.6	18.1	21.0	20.9	23.2	25.9	23.5	25.5	22.6	24.6	26.6	24.1
Men 35 to 64 years old	16.5	16.6	18.3	20.2	17.1	15.2	21.2	16.2	15.4	14.4	16.8	18.0	14.7
Women 35 to 64 years old	4.1	3.6	4.9	6.3	5.5	5.0	8.8	5.9	5.5	5.4	7.4	6.7	6.1

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Looking at the time period of the last 30 days, 6.4% of the population aged 15 to 64 years old admits to having suffered some acute alcohol intoxication during the 30 days prior to the survey (Table 38).

8.5% of men admit to having been drunk in the last month, a figure that is more than halved among women (4.2%). Regardless of the age group, and as is the case for the time period of the last year, prevalence is higher among men.

With regard to age, the highest prevalence is found in the 15-24 age group, and decreases as individuals get older.

TABLE 38. Prevalence of acute alcohol intoxication (drunkenness) in the last 30 days among the population aged 15-64, by sex and age (%). Spain, 2022.

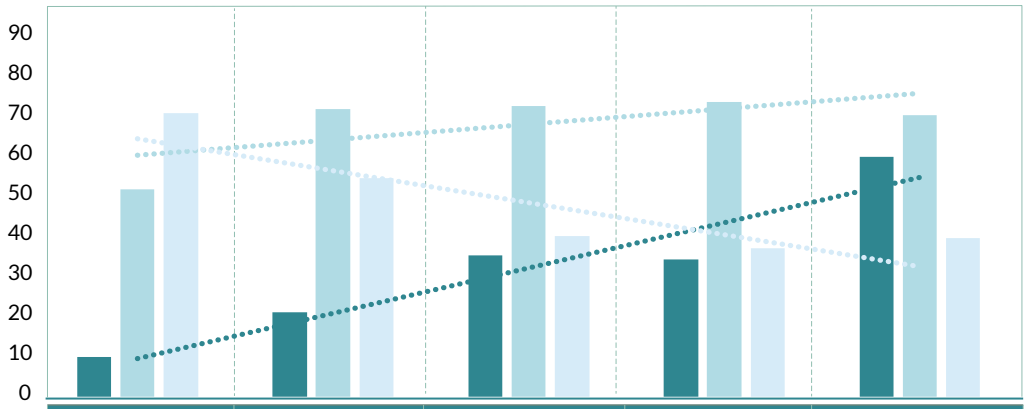
15-64 years old			15-24 years old			25-34 years old			35-44 years old			45-54 years old			55-64 years old		
T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W
6.4	8.5	4.2	15.5	17.5	13.5	9.4	12.6	6.2	5.2	7.6	2.9	3.4	5.3	1.5	1.9	3.3	0.6

T: Total; M: Men; W: Women

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Regarding the type of beverages consumed in the last 7 days among those who were drunk in the last 30 days, different drinking patterns are observed according to age (Figure 15). The percentage of **wine** consumers increases with age, peaking in the 55-64 age group. On the other hand, the prevalence of **mixed drinks** decreases progressively as the age of those who got drunk increases. Consumption is more widespread among younger people. Finally, for **beer**, there is a very similar level of consumption for all age groups.

FIGURE 15. Prevalence of wine, beer and mixed drinks consumption in the last 7 days in the population aged 15-64 years old who have been drunk in the last 30 days, by age (%). Spain, 2022.



	15 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old
Wine last 7 days	10.2	21.5	36.2	35.2	61.5
Beer last 7 days	53.2	73.6	74.6	75.5	72.1
Mixed drinks last 7 days	72.6	55.9	41.2	38.1	40.5

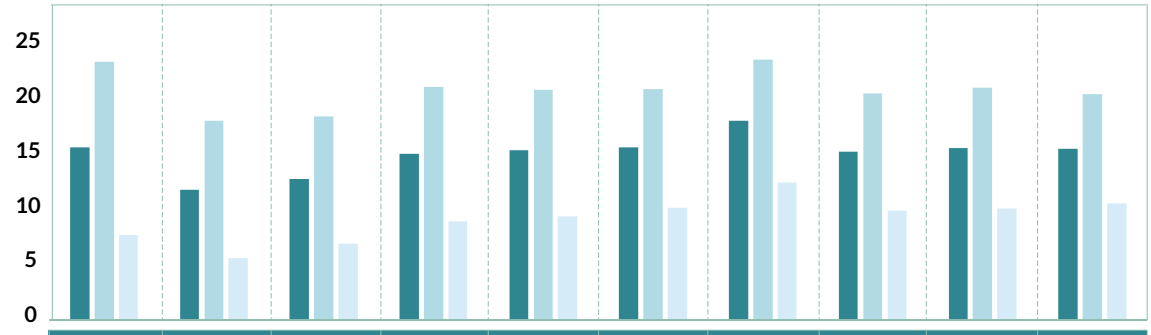
SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.5 *Binge drinking* (binge consumption of alcohol)

Binge drinking is defined as the consumption of 5 or more alcoholic drinks (if male) or 4 or more alcoholic drinks (if female) on the same occasion, i.e. in a row or within two hours of each other. The EDADES survey measures *binge drinking* in the time period of the last month.

In 2022, a similar figure to that obtained in the previous survey was recorded, with an increase in the prevalence of *binge drinking* among women (Figure 16). Despite this increase, *binge drinking* is still more prevalent among men than among women for all age groups (Figure 17).

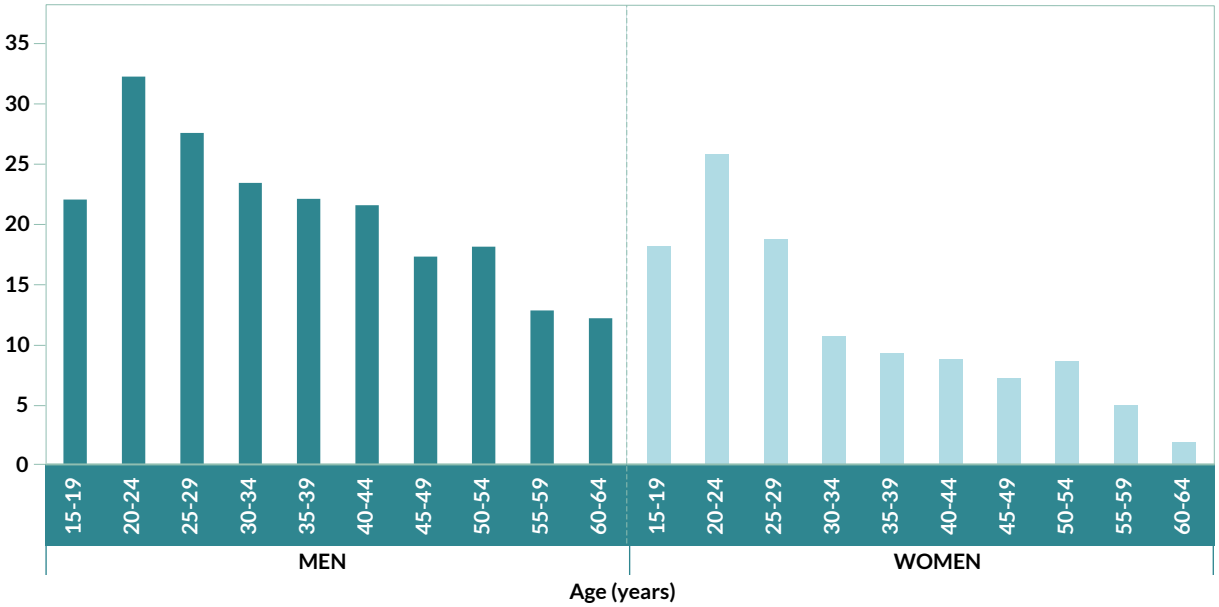
FIGURA 16. Prevalence of binge drinking in the last 30 days in the population aged 15-64 years old, by sex (%). Spain, 2003-2022.



	2003	2005	2007	2009	2011	2013	2015	2018	2020	2022
Total	15.5	11.6	12.6	14.9	15.2	15.5	17.9	15.1	15.4	15.4
Men	23.3	17.9	18.3	21	20.7	20.8	23.5	20.4	20.9	20.3
Women	7.5	5.4	6.7	8.7	9.2	10	12.3	9.7	9.9	10.4

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

FIGURE 17. Prevalence of binge drinking in the last 30 days in the population aged 15-64 years old, by sex and age (%). Spain, 2022.

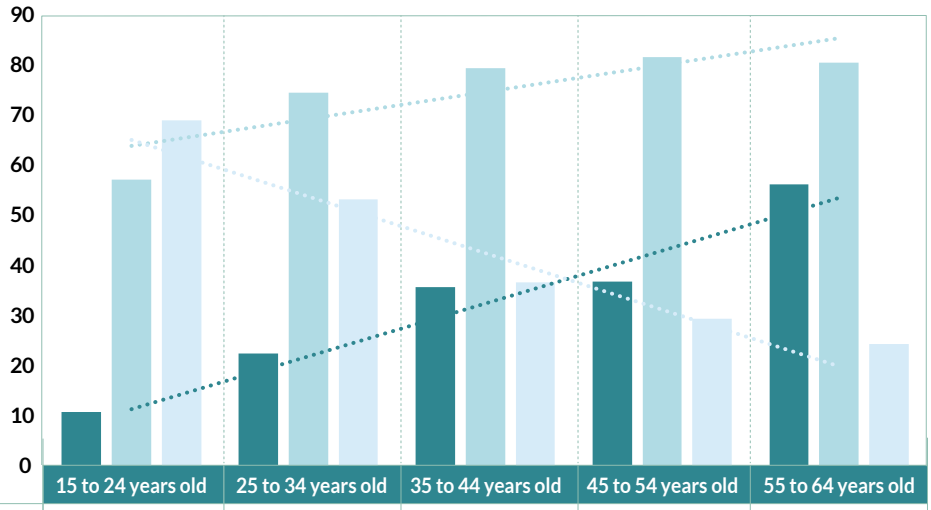


SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

As with self-reported drunkenness, as individuals' age increases, the prevalence of wine consumption increases and the prevalence of mixed drinks decreases (Figure 18).

Finally, **beer** is the drink whose consumption is most widespread among those who admit to *binge drinking* in the last 30 days, with a similar prevalence in all age groups, except for the youngest, which is approximately five points lower than the rest of the age groups.

FIGURE 18. Prevalence of wine, beer and mixed drinks consumption in the last 30 days among those who have indulged in binge drinking in the last 30 days, in the population aged 15-64 years old, by age (%). Spain 2022.



	15 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old
Wine last 7 days	10.6	22.3	35.6	36.7	56.1
Beer last 7 days	57.0	74.2	79.2	81.4	80.2
Mixed drinks last 7 days	68.7	52.9	36.4	29.2	24.2

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.6 Participation in *botellón* (gathering in public spaces to drink store bought alcohol)

Looking at **sex**, in all age groups, the prevalence of participation in *binge drinking* in the last 12 months is higher in males than in females (Table 39).

In the 15-18 age group, slightly more than a third (32.2%) admit to having engaged in this practice in the last year, with practically no difference between males and females.

TABLE 39. Prevalence of participation in *botellón* in the last 12 months among the population aged 15-64, by sex and age (%). Spain, 2022.

15-24 years old			25-34 years old			35-44 years old			45-54 years old			55-64 years old			15-18 years old		
Total	M	W	Total	M	W	Total	M	W	Total	M	W	Total	M	W	Total	M	W
32.2	34.0	30.3	**9.3**	10.6	7.9	**2.5**	3.4	1.5	**1.1**	1.6	0.7	**0.7**	0.8	0.5	**32.2**	32.1	32.3

M: Men; W: Women

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.7 Reasons for drinking alcohol

In terms of the reasons why individuals consume alcoholic beverages, irrespective of sex, more than half of alcohol consumers consume alcohol because it is fun and it livens up parties (Table 40). Secondly, four out of ten individuals consume alcohol because they like the way they feel after drinking.

TABLE 40. Reasons for drinking alcoholic beverages among the population aged 15-64, by sex (%). Spain, 2018-2022.

	2018			2020			2022		
	Total	M	W	Total	M	W	Total	M	W
They like the feeling after drinking	**44.0**	48.5	38.6	**32.7**	37.0	27.7	**37.3**	41.4	32.6
It's fun and livens up parties	**56.1**	58.4	53.2	**56.2**	55.6	56.8	**51.2**	49.9	52.7
Only for getting drunk	**12.0**	14.4	9.1	**2.0**	2.5	1.4	**1.7**	2.1	1.3
Fitting in with a group or not feeling excluded	**19.6**	21.1	17.8	**17.4**	16.9	18.1	**13.1**	12.6	13.7
Helps to forget about everything	**12.6**	14.3	10.5	**3.3**	3.8	2.8	**4.8**	4.9	4.6
Believes it is healthy or part of a balanced diet	**17.2**	18.6	15.4	**14.8**	16.1	13.3	**18.3**	19.7	16.8

M: Men; W: Women

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.8 Attitudes towards certain alcohol policies

The following results are available on the attitudes of the population aged 15-64 towards certain alcohol policies (Table 41).

Firstly, it is worth noting that there is a consensus that all the measures analysed would be appropriate to combat alcohol consumption, however, the most popular measure is to include warnings on packaging about the harm that consumption can cause to the body, with 7 out of 10 individuals agreeing with this.

In terms of sex, women are more aware of anti-alcohol policies, irrespective of age.

TABLE 41. Attitudes towards certain alcohol policies among the population aged 15-64, by sex (%). Spain, 2018-2022.

	2018			2020			2022		
	Total	M	W	Total	M	W	Total	M	W
Banning advertising	59.9	54.7	65.0	71.5	68.2	74.7	57.7	53.3	62.2
Packaging with damage warnings	78.4	75.2	81.7	82.7	80.6	84.8	73.3	69.4	77.2
Sponsorship of athletes banned	64.9	60.4	69.4	74.8	71.5	78.1	64.0	59.1	68.9

M: Men; W: Women

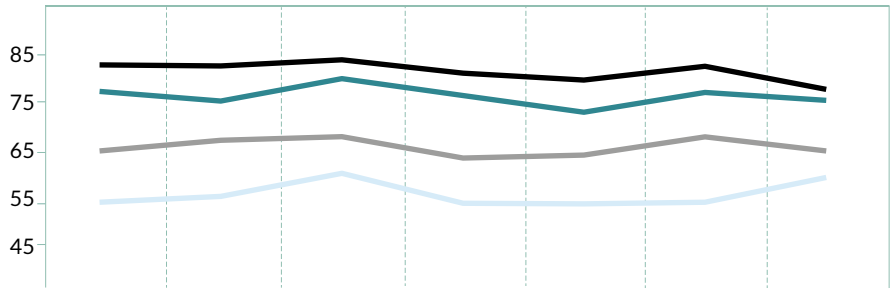
SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.9 Alcohol among 15–24-year-olds

The following results are available on alcohol consumption among 15–24-year-olds, based on data from the EDADES survey (Figure 19).

In 2022, 77.3% of boys and 75.1% of girls aged 15-24 report having consumed alcohol in the last year, while 65.2% of boys and 60.0% of girls report alcohol consumption in the last month. The general trends have remained fairly stable since 2009, although the latest edition of the EDADES survey shows a decrease in the prevalence of consumption among boys in this age group.

FIGURE 19. Prevalence of alcohol consumption in the last 12 months and in the last 30 days among 15–24-year-olds, by sex (%). Spain, 2009-2022.



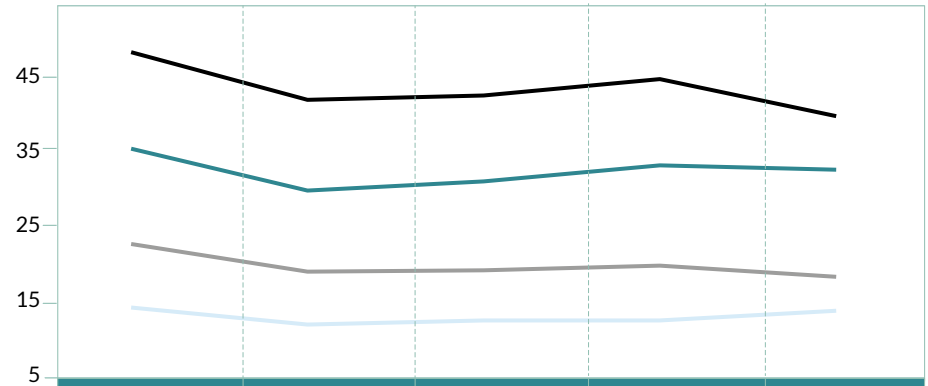
	2009	2011	2013	2015	2018	2020	2022
Last 12 months men	82.1	81.9	83.1	80.5	79.1	81.9	77.3
Last 12 months women	76.9	75	79.4	76.1	72.8	76.7	75.1
Last 30 days men	65.2	67.3	68.0	63.8	64.4	68.0	65.2
Last 30 days women	55.1	56.3	60.8	54.9	54.8	55.1	60.0

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Regarding **risky drinking patterns**, such as **self-reported drunkenness**, among 15–24-year-olds, 39.0% of boys and 31.4% of girls report having been drunk in the last year, while 17.5% of boys and

13.5% of girls report having been drunk in the last month (Figure 20). The general trends have remained fairly stable since 2015, although the latest edition of the EDADES survey shows a decrease in the prevalence of drunkenness among boys in this age group.

FIGURE 20. Prevalence of drunkenness in the last 12 months and in the last 30 days among 15–24-year-olds, by sex (%). Spain, 2013-2022.

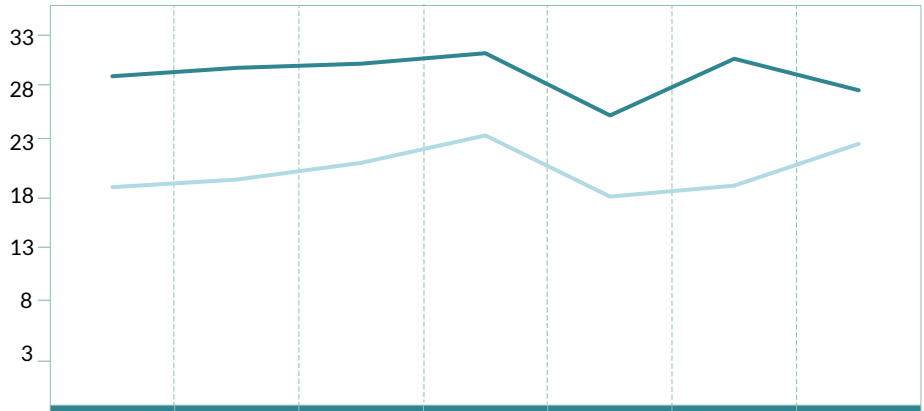


	2013	2015	2018	2020	2022
Last 12 months men	48.0	41.3	41.9	44.2	39.0
Last 12 months women	34.4	28.5	29.8	32.1	31.4
Last 30 days men	22.1	18.2	18.4	19.0	17.5
Last 30 days women	13.9	11.5	12.1	12.1	13.5

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Finally, in 2022, 27.1% of boys aged 15 to 24 years old report some episode of ***binge drinking*** in the last month, compared to 22.0% of girls of the same age (Figure 21). The prevalence of *binge drinking* has decreased among boys and increased among girls, compared to the data from this survey in the previous edition.

FIGURE 21. Prevalence of binge drinking in the last 30 days among the population aged 15-24, by sex (%). Spain, 2009-2022.



	2009	2011	2013	2015	2018	2020	2022
Aged 15-24 men	28.4	29.2	29.6	30.6	24.7	30.1	27.1
Aged 15-24 women	17.9	18.6	20.2	22.8	17.0	18.1	22.0

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.10 Low-risk alcohol consumption

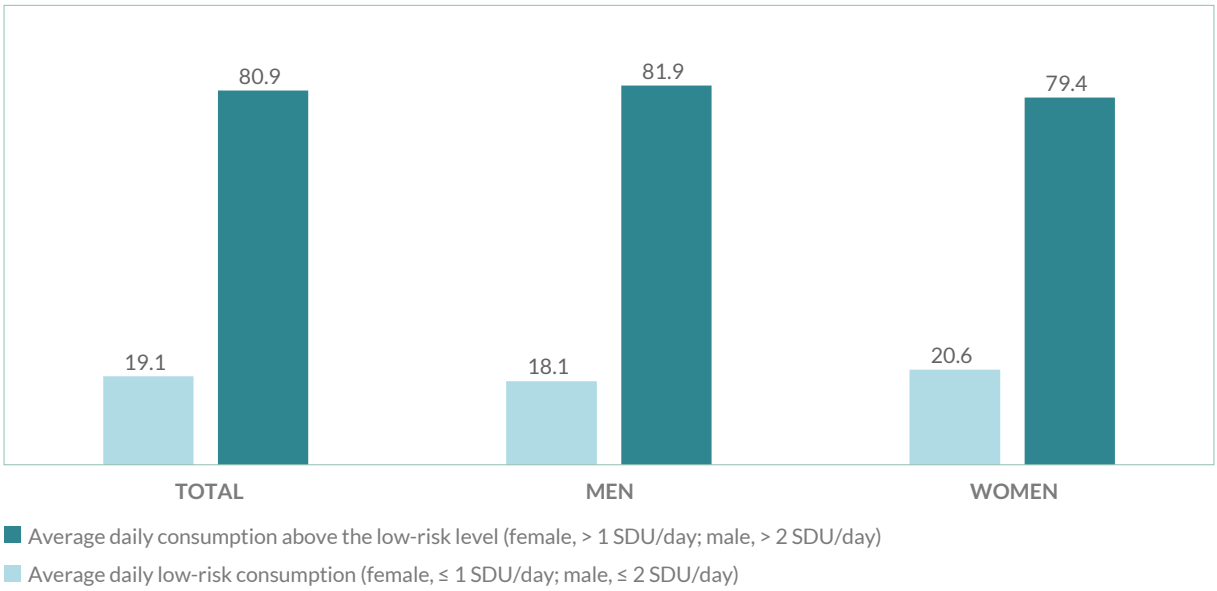
The Ministry of Health, in collaboration with a group of experts, carried out a review of the available evidence to establish the limit of consumption that can be considered low risk, with the aim of reducing health problems, injuries, harm to third parties and the social and economic consequences of its consumption. The consensus reached was approved by the Public Health Commission of the NHS Interterritorial Council and published by the Ministry of Health [25].

According to this consensus, low-risk alcohol consumption is established as the average consumption above which there is a significant increase in mortality, which does not mean that, below this consumption, mortality is not increased as it is only avoided by not consuming alcohol.

Considering the physiological differences and the ability to metabolise alcohol between men and women, the limits for low-risk alcohol consumption are set at a **maximum of 20 g/day (2SDUs/day) for men and 10 g/day (1 SDU/day) for women**, assuming that there is no zero risk.

According to these limits, 80.9% of the population aged 15-64 reporting the amounts of alcohol consumed have, according to information from the latest edition of the EDADES 2022 Survey, an alcohol consumption below the low-risk level, while 19.1% consume above this level (Figure 22).

FIGURE 22. Prevalence of alcohol consumption above or below the low-risk level (up to 20 g/day (2SDUs/day) in men and up to 10 g/day (1 SDU/day) in women) in the population aged 15-64 years old who reported quantities of alcohol consumed, by sex (%). Spain, 2022.



SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Those who consume above the low-risk level have a lower average age, especially among females, and tend to have a lower educational level (Table 42). This population also has a higher percentage of heavy drinking and risk drinking estimated on the basis of the AUDIT scale. However, among the population with alcohol consumption below the low-risk level, there is a percentage with other risks derived from heavy drinking (7.0% drunkenness and 18.6% *binge drinking* in the last month) or risky drinking estimated on the basis of the AUDIT scale (4.9%).

TABLE 42. Characteristics of the population aged 15-64 years old, who have reported the amounts of alcohol consumed, according to their average level of consumption, considering low risk up to 20 g/day (2SDUs/day) in men and 10g/day (1 SDU/day) in women, according to sex (%). Spain, 2022.

		Low-risk alcohol consumption*			Consumption above the low-risk level **		
		Total	Men	Women	Total	Men	Women
Age	Average age	42.3	42.2	42.5	39.7	42.0	36.6
Educational level	No education/primary education	6.6	7.3	5.5	9.7	13.2	5.2
	Secondary education	66.8	68.5	64.3	71.2	72.7	69.4
	University studies	26.6	24.2	30.2	19.1	14.1	25.4
Heavy drinking	Drunkenness last 30 days	7.0	8.8	4.3	27.4	29.9	24.3
	Binge Drinking last 30 days	18.6	22.3	13.1	59.7	65.8	52.0
Risky consumption	Audit Positive (cut-off points 8 Male/ 6 Female)	4.9	5.3	4.4	34.9	37.5	31.6

*Low Risk consumption (up to 20 g/day (2SDUs/day for men and up to 10g/day (1 SDU/day) for women)
** Consumption above the Low Risk level (from 21 g/day (2SDUs/day in men and from 11g/day (1 SDU/day) in women)

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

4.3.11 Alcohol consumption by Autonomous Regions/Cities

The lifetime prevalence of alcohol consumption is above 90% in most of the Autonomous Regions, with Valencia registering the highest prevalence (96.9%), while Melilla has the lowest prevalence in Spain (37.6%).

In both the time period of the last 12 months and the last 30 days, the region with the highest prevalence is Valencia, while the regions with the lowest prevalence are Melilla and Ceuta.

TABLE 43. Prevalence of drinking alcoholic beverages among the population aged 15-64 by Autonomous Region/City (%). Spain, 2022.

	LIFETIME			LAST 12 MONTHS			LAST 30 DAYS		
	Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI	Prevalence	Lower 95%CI	Upper 95%CI
Andalusia	93.2	92.1	94.2	74.8	73.0	76.6	59.5	57.4	61.5
Aragon	93.9	92.2	95.5	82.5	80.0	85.1	71.7	68.7	74.7
Asturias	95.9	94.8	96.9	79.8	77.6	82.0	71.9	69.5	74.4
Balearic Islands	91.8	89.9	93.7	67.9	64.7	71.1	54.8	51.5	58.2
Canary Islands	91.7	90.4	93.1	75.5	73.4	77.5	60.4	58.1	62.8
Cantabria	94.9	93.6	96.3	78.4	75.9	81.0	63.8	60.9	66.8
Castile and Leon	95.5	94.5	96.4	79.5	77.6	81.4	68.4	66.2	70.5
Castilla La Mancha	91.9	90.6	93.2	69.9	67.6	72.1	63.8	61.4	66.2
Catalonia	91.3	90.1	92.5	74.3	72.4	76.1	61.7	59.6	63.7
Valencia	96.9	96.1	97.6	88.0	86.7	89.3	73.3	71.4	75.1
Extremadura	90.4	88.4	92.5	67.8	64.6	71.1	58.4	54.9	61.8
Galicia	94.7	93.7	95.8	75.2	73.2	77.3	65.0	62.7	67.2
Madrid	92.8	91.8	93.8	73.1	71.3	74.8	64.5	62.6	66.4
Murcia	92.2	90.8	93.5	81.1	79.1	83.1	69.4	67.1	71.7
Navarre	94.7	93.4	95.9	81.0	78.7	83.2	71.1	68.6	73.7
Basque Country	95.0	93.7	96.3	81.1	78.8	83.4	71.0	68.3	73.7
La Rioja	93.3	91.8	94.9	77.7	75.1	80.2	68.4	65.5	71.3
Ceuta	65.7	62.0	69.5	53.2	49.3	57.1	44.7	40.8	48.6
Melilla	37.6	31.3	43.9	31.1	25.1	37.1	25.6	19.9	31.2
Average Spain	**93.2**	**92.9**	**93.5**	**76.4**	**75.9**	**76.9**	**64.5**	**63.9**	**65.0**

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

MAP Nº 4. Prevalence of alcoholic beverages consumption in the last 30 days among the population aged 15-64 years old by Autonomous Region/City (%). Spain, 2022.

According to sex, in all time periods and in all Autonomous Regions, the prevalence of drinking is higher in men than in women.

TABLE 44. Prevalence of alcoholic beverages consumption in the population aged 15-64, by Autonomous Region, by sex. Spain, 2022.

	LIFETIME		LAST 12 MONTHS		LAST 30 DAYS	
	M	W	M	W	M	W
Andalusia	95.4	90.9	82.8	66.8	71.1	47.8
Aragon	95.3	92.3	84.9	80.1	79.0	64.1
Asturias	96.7	95.0	84.7	74.9	79.3	64.7
Balearic Islands	92.9	90.6	75.4	60.2	64.3	45.1
Canary Islands	94.9	88.6	81.9	69.0	68.9	51.9
Cantabria	96.2	93.6	85.2	71.7	72.8	54.9
Castile and Leon	97.5	93.3	85.1	73.7	76.9	59.5
Castilla La Mancha	95.4	88.3	78.2	61.1	74.4	52.6
Catalonia	91.9	90.7	77.0	71.4	68.4	54.8
Valencia	97.1	96.7	90.1	85.8	79.7	66.8
Extremadura	95.9	84.8	82.9	52.3	74.6	41.6
Galicia	96.1	93.3	83.2	67.4	75.2	54.9
Madrid	95.6	90.1	79.3	67.1	72.7	56.7
Murcia	94.3	89.9	84.9	77.1	75.8	62.6
Navarre	95.3	94.0	85.4	76.4	78.8	63.3
Basque Country	95.3	94.7	85.8	76.3	77.8	64.2
La Rioja	94.7	92.0	81.0	74.3	74.7	62.0
Ceuta	72.9	58.2	60.3	45.7	52.6	36.3
Melilla	45.7	29.0	36.0	26.0	28.5	22.4
Average Spain	**94.9**	**91.4**	**82.1**	**70.8**	**73.1**	**55.7**

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

In terms of **acute alcohol intoxication (self-reported drunkenness)** in the last 12 months, the highest prevalences are observed in Navarre and the Canary Islands, with prevalences above 25%.

TABLE 45. Prevalence of acute alcohol intoxication (self-reported drunkenness) in the last 12 months among the population aged 15-64 by Autonomous Region/City (%). Spain, 2022.

	Acute alcohol intoxication (drunkenness) last 12 months		
	Prevalence	Lower 95%CI	Upper 95%CI
Andalusia	16.1	14.6	17.6
Aragon	15.6	13.1	18.0
Asturias	14.5	12.6	16.4
Balearic Islands	18.8	16.2	21.5
Canary Islands	25.6	23.5	27.7
Cantabria	16.0	13.7	18.3
Castile and Leon	16.9	15.2	18.7
Castilla La Mancha	17.4	15.6	19.3
Catalonia	15.2	13.7	16.8
Valencia	12.3	11.0	13.7
Extremadura	21.7	18.8	24.6
Galicia	20.0	18.1	21.8
Madrid	13.3	11.9	14.6
Murcia	23.7	21.6	25.9
Navarre	27.5	25.0	30.0
Basque Country	20.4	18.0	22.8
La Rioja	24.3	21.6	27.0
Ceuta	10.8	8.3	13.2
Melilla	12.0	7.8	16.2
Average Spain	**16.7**	**16.2**	**17.1**

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

With regard to ***binge drinking***, Murcia, La Rioja and the Canary Islands are the Autonomous Regions with the highest prevalence rates in the last 30 days.

TABLE 46. Prevalence of binge drinking in the last 30 days among the population aged 15-64 by Autonomous Region/City (%). Spain, 2022.

	Binge drinking in the last 30 days		
	Prevalence	Lower 95%CI	Upper 95%CI
Andalusia	16.6	15.0	18.1
Aragon	11.6	9.5	13.8
Asturias	16.3	14.3	18.3
Balearic Islands	12.2	10.0	14.4
Canary Islands	22.7	20.7	24.7
Cantabria	12.2	10.2	14.2
Castile and Leon	15.9	14.2	17.6
Castilla La Mancha	18.7	16.7	20.6
Catalonia	9.6	8.4	10.9
Valencia	14.0	12.5	15.4
Extremadura	20.3	17.5	23.1
Galicia	22.6	20.7	24.6
Madrid	13.1	11.8	14.4
Murcia	24.6	22.4	26.8
Navarre	16.6	14.5	18.7
Basque Country	17.0	14.8	19.2
La Rioja	22.9	20.3	25.5
Ceuta	12.2	9.7	14.8
Melilla	8.6	4.9	12.2
Average Spain	**15.4**	**14.9**	**15.8**

SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

MAP Nº 5. Prevalence of binge drinking in the last 30 days among the population aged 15-64 by Autonomous Region/City (%). Spain, 2022.

4.4 Survey on Health and Drug use among Prisoners (ESDIP 2022)

ESDIP is a survey of prisoners (men and women over 18 years old) in prisons in Spain, which is carried out every five years (editions in 2006, 2011, 2016 and 2022). In 2022, 5,512 inmates were interviewed in 78 prisons throughout Spain. The results obtained are nationally representative. The data on alcohol consumption from the ESDIP survey are summarised below.

The **socio-demographic profile of male inmates** is that of a Spanish man in his 40s who stopped studying at the end of Secondary School or before. During the 12 months prior to entering prison, he was working and mostly living in stable accommodation with his family. 9% lived in unstable accommodation.

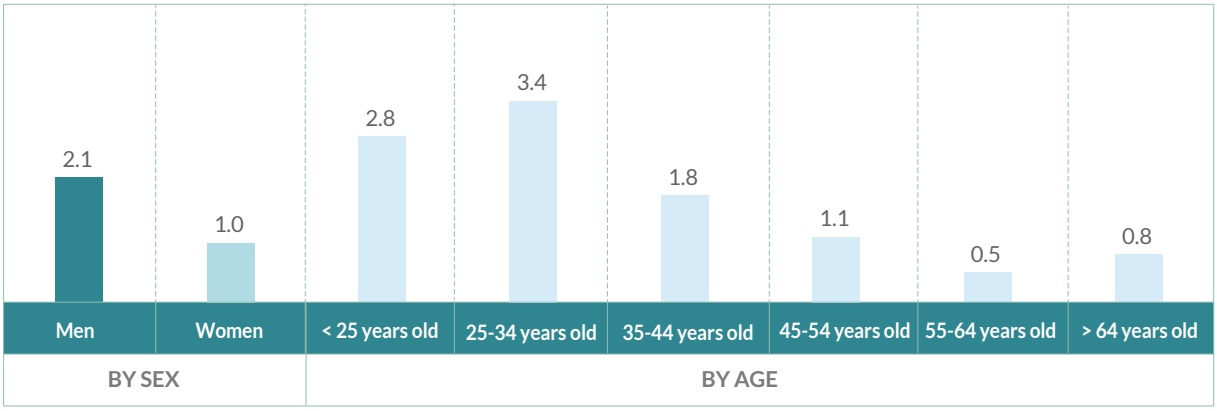
The **socio-demographic profile of female inmates** is that of a 41-year-old Spanish woman who stopped studying at the end of Secondary School or before. During the 12 months prior to entering prison, she was unemployed and seeking employment, or not active, and mostly living in stable accommodation with her children. It is worth noting that 15.3% were living in unstable accommodation prior to their current entry in prison.

4.4.1 Prevalence of alcohol consumption

Compared to the general population aged 15-64 years old, alcohol is the only substance with a lower prevalence of use in the last 12 months among prisoners before entering prison (60.3%) than in the general population (76.4%).

Alcohol is the psychoactive substance most commonly used by prisoners before incarceration, and the one that shows the greatest decline on entering prison. 54.5% of prisoners reported alcohol consumption in the last 30 days before entering prison, while 2.0% said that they had consumed alcohol in prison in the last 30 days. Consumption in prison is more widespread among men and among prisoners under 35 years old (Figure 23).

FIGURE 23. Prevalence of alcohol consumption in prison within the last 30 days, by sex and age (%). Spain 2022.



SOURCE: Survey on health and drug use among prisoners. ESDIP 2022.

From 2006 to 2022 there is a downward trend in the prevalence of alcohol consumption in prison in the past 30 days (Figure 24).

FIGURE 24. Prevalence of alcohol consumption among prisoners within the last 30 days (%). Spain, 2006-2022.

	2006	2011	2016	2022
Alcohol	3.7	3.8	2.2	2.0

SOURCE: Survey on Health and Drug Use among Prisoners (ESDIP).

4.4.2 Treatment for alcohol consumption

With regard to treatment for alcohol consumption **while on parole**, 58.6% have received psychological therapy and/or support groups, 18.0% alcohol aversion therapy, 11.8% treatment with benzodiazepines or anticonvulsants, and 11.6% therapy with drugs to suppress cravings such as naltrexone or acamprosate. With regard to treatment for alcohol consumption **while in prison**, 81.8% have received psychological therapy and/or support groups, and 18.2% have received pharmacological treatment including alcohol aversion therapy or treatment with benzodiazepines or anticonvulsants, or drug therapy to suppress cravings.

5 Sales of alcoholic beverages, 2015-2022

This section is based on data provided by the State Tax Administration Agency (AEAT) of the Ministry of Finance and Public Function, published each year in its Annual Tax Collection Report [22]. These reports provide information on the level and annual evolution of the volume of consumption of alcoholic beverages and tax revenues derived from excise duties managed by the Tax Agency on behalf of the State, the Autonomous Regions (CCAA) and the Local Corporations (CCLL) of the Common Fiscal Regime Territory. They provide information on the demand for alcoholic beverages in Spain and its evolution over time by type of beverage. Alcoholic beverages are those with an alcohol content of more than 1.2%.

For a proper interpretation of the data, the following clarifications are necessary:

1. The variation in tax revenue from alcohol sales over time is not only related to the volume of alcoholic beverages sold, but also to the variation in taxes.

2. As the special tax on wine is zero, the information published by the AEAT on wine traditionally came from the survey of households and commercial and social catering establishments carried out by the Ministry of Agriculture, Fisheries and Food. Since 2015, a change has taken place, and the data published by the AEAT on wine comes from its own sources[1]. This section therefore focuses on the period since 2015, when the source of information for all alcoholic beverages is the same.

3. The data provided by the AEAT do not allow a breakdown by Autonomous Regions.

4. As the information comes from the AEAT, it refers exclusively to beverages in legal circulation or "registered alcohol". These figures cannot be extrapolated exclusively for the calculation of per capita alcohol consumption in Spain, which would be given by the sum of "registered" and "unregistered" alcohol (that brought by a Spanish traveller from abroad, illegal alcohol, as well as home-made alcohol, since legislation exempts products made by private individuals for non-commercial purposes from special tax), from which "tourist" alcohol (estimated amount of alcohol consumed or taken out of the country by tourists) would be subtracted.

5. Main data on sales of alcoholic beverages, 2015-2022.

1 Article 66.5 of the Regulation on Excise Duties: "*As long as the tax rate is zero, manufacturers and holders of tax warehouses shall submit to the managing office and within the first twenty days of the months of January, April, July and October, a summary subject to the model approved by the managing centre, of the movement there has been in the establishment during the immediately preceding calendar quarter.*"

Table 47 shows in detail the evolution of the millions of litres (of actual volume and pure alcohol), as well as the average percentage of alcohol, by type of beverage from 2015 to 2022.

TABLE 47. Actual volume and volume of pure alcohol (million litres) by type of beverage. Spain 2015-2022.

	2015	2016	2017	2018	2019	2020	2021*	2022*
Consumption of derived beverages (x 106 litres)								
Actual volume(1)	264	281	264	266	296	206	256	301
Average alcohol percentage (2)	34.75	34.70	34.61	34.52	31.35	31.57	33.84	34.18
Pure alcohol (3)=(1)*(2)/100	92	98	91	92	93	65	87	103
Beer consumption (x 106 litres)								
Actual volume (1)	3,537	3,652	3,793	3,828	3,988	3,563	3,823	4,057
Average alcohol percentage (2)	4.68	4.69	4.72	4.76	4.75	4.77	4.81	4.82
Pure alcohol (3)=(1)*(2)/100	166	171	179	182	189	170	184	196
Intermediate products consumption (x 106 litres)								
Actual volume (1)	50	52	51	51	53	46	56	56
Average alcohol percentage (2)	14.26	14.27	14.28	14.29	14.30	14.30	14.29	14.29
Pure alcohol (3)=(1)*(2)/100	7.1	7.5	7.3	7.3	7.6	6.6	8.0	8.0
Wine consumption (million litres)								
Actual volume (1)	1,222	1,276	1,287	1,112	1,187	941	1,229	1,350
Still wines	1,052	1,092	1,115	938	996	793	1,078	1,174
Sparkling wines	74	80	74	72	82	62	80	101
Still fermented beverages	74	82	71	80	91	70	56	60
Sparkling fermented beverages	22	23	26	22	19	16	15	14
Average alcohol percentage (2)	12.03	12.01	11.96	11.95	11.83	11.76	12.00	13.07
Still wines	12.69	12.70	12.56	12.71	12.60	12.55	12.52	13.74
Sparkling wines	11.24	11.18	11.15	11.10	11.15	10.66	11.03	10.91
Still fermented beverages	5.69	5.72	6.08	5.86	5.51	5.51	5.68	5.74
Sparkling fermented beverages	4.15	4.57	4.57	4.38	4.40	4.44	3.99	4.11
Pure alcohol (3)=(1)*(2)/100	147	153	154	133	140	111	148	176
Still wines	134	139	140	119	125	100	135	161
Sparkling wines	8	9	8	8	9	7	9	11
Still fermented beverages	4	5	4	5	5	4	3	3
Sparkling fermented beverages	1	1	1	1	1	1	1	1
TOTAL CONSUMPTION (x 106 litres)	**5,072**	**5,261**	**5,395**	**5,257**	**5,524**	**4,756**	**5,364**	**5,764**

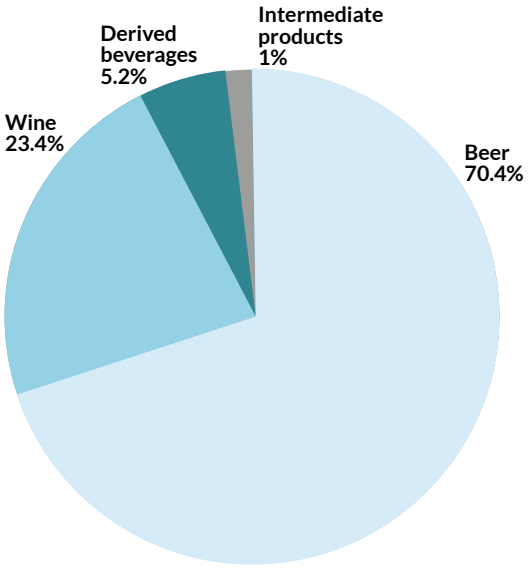
* Provisional data

Source: Tax Agency (Table adapted from Table 9.3 of the Annual Tax Collection Report 2022).

As can be seen, the **total volume of alcoholic beverage sales** in 2022 stands at 5,764 million litres, the highest level in this historical series (Table 46). The evolutionary data (Figure 25) point to an upward trend in the total consumption of alcoholic beverages over these years, without taking into account the sharp decline observed in 2020, which would be due to the restrictions caused by the Covid-19 pandemic.

With regard to the distribution of **total sales by type of alcoholic beverage**, the data for 2022 show that the beverage with the highest volume of consumption in Spain is beer, which accounts for 70.4% of total alcoholic beverage sales.

FIGURE 25. Distribution of the percentage of sales in litres of beverage by type of beverage (%). Spain, 2022*.



* Provisional data

SOURCE: Tax Agency (Annual Tax Collection Report 2022).

Wine, including cider, is in second place, accounting for 23.4% of the volume of sales of alcoholic beverages. Derived beverages, which include spirits and liqueurs, account for 5.2% of total sales volume. Intermediate products, which include vermouth and muscatel, have a residual presence of 1.0% (Figure 26).

The **weight of the different types of alcoholic beverages** has been stable throughout the historical series, with beer and wine being the beverages with the highest sales volume in all these years. Compared to 2021, in 2022 sales of derived beverages mainly increased (17.8%) (Table 48). This type of beverages associated with leisure consumption (limited in 2020) showed the largest drop in sales volume in 2020, subsequently recovering levels with the increase in 2021 and 2022.

Wine sales volume has also experienced significant increases after the drop observed due to the Covid-19 pandemic.

Beer sales, on the other hand, show a clear upward trend over the historical series that is only truncated by the significant drop in sales due to the Covid-19 pandemic restrictions, which significantly affected sales in 2020 and probably also, to a lesser extent, in 2021.

TABLE 48. Volume of alcoholic beverage consumption (million litres) and percentage change (%). Spain, 2015-2022.

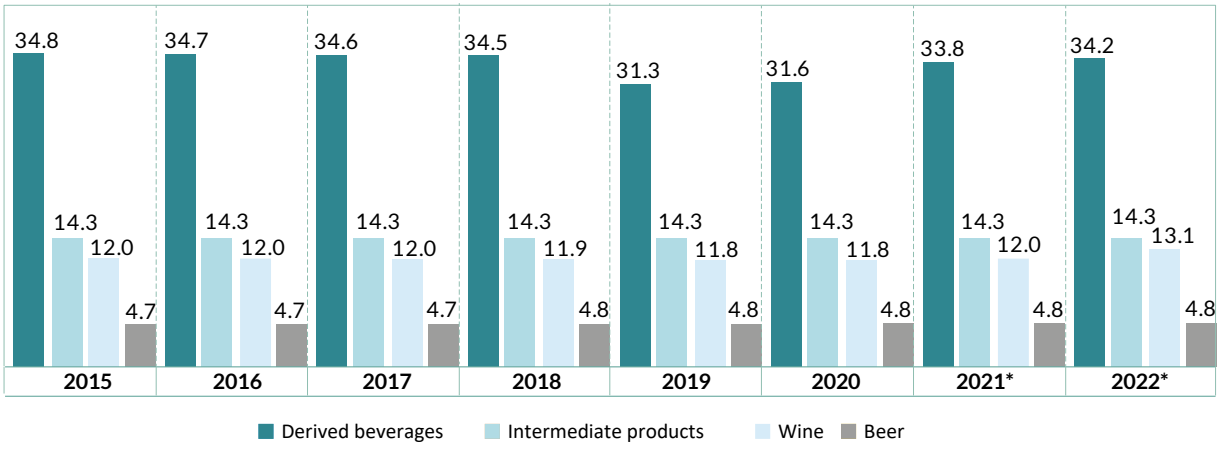
	2015	2016	2017	2018	2019	2020	2021*	2022*	% variation 2020-2021	% variation 2021-2022
Beer	3,537	3,652	3,793	3,828	3,988	3,563	3,823	4,057	7.3	6.1
Wine	1,222	1,276	1,287	1,112	1,187	941	1,229	1,350	30.6	9.9
Derived beverages	264	281	264	266	296	206	256	301	24.1	17.8
Intermediate products	50	52	51	51	53	46	56	56	21.6	-0.8
Total	5,072	5,261	5,395	5,257	5,524	4,756	5,364	5,764	12.8	7.5

* Provisional data

Source: Tax Agency (Annual Tax Collection Report 2022).

With regard to the alcohol content of beverages, the **percentages of pure alcohol by type of beverage** have remained fairly stable between 2015 and 2022. Only the 1% increase of alcohol in wine in 2022 and the recent oscillations observed in derived beverages, where the alcohol content decreased in the years 2019-2020 and then increased again to reach 34.2% alcohol in 2022, are worth mentioning. (Figure 26).

FIGURE 26. Average percentage of alcohol by type of beverage (%). Spain, 2015-2022.

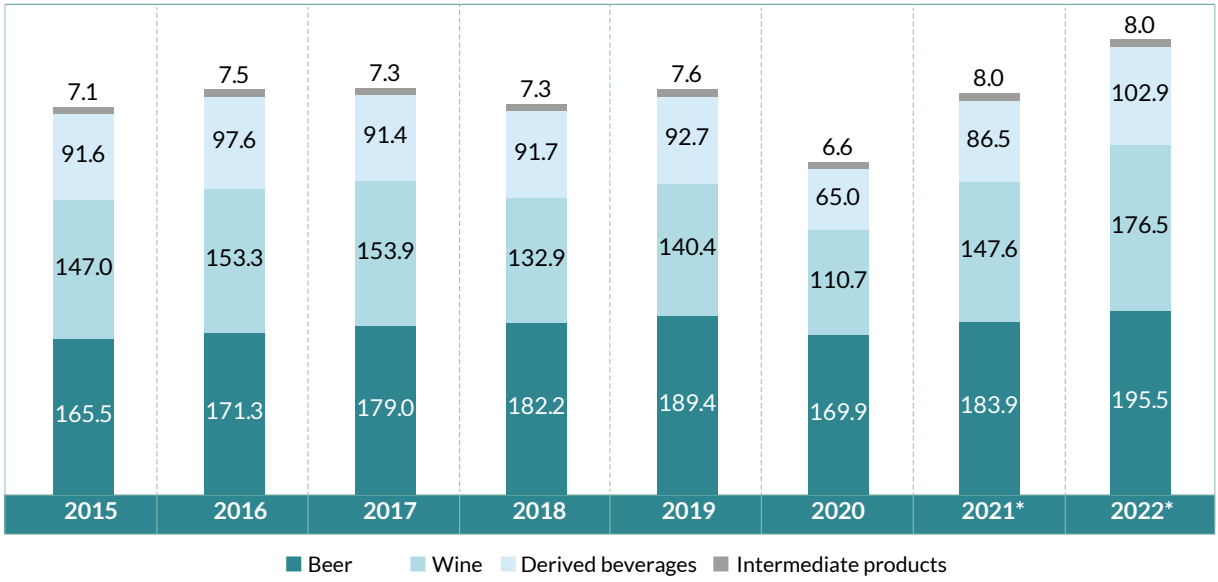


* Provisional data

SOURCE: Tax Agency (Annual Tax Collection Report 2022).

With regard to the **total volume of alcohol** estimated from the sales of the different types of alcoholic beverages, there was a marked decrease in 2020 for all of them, which could be explained by the restriction measures taken to control the Covid-19 pandemic.

FIGURE 27. Volume of pure alcohol consumed each year, by type of alcoholic beverage (millions of litres of pure alcohol). Spain, 2015-2022.



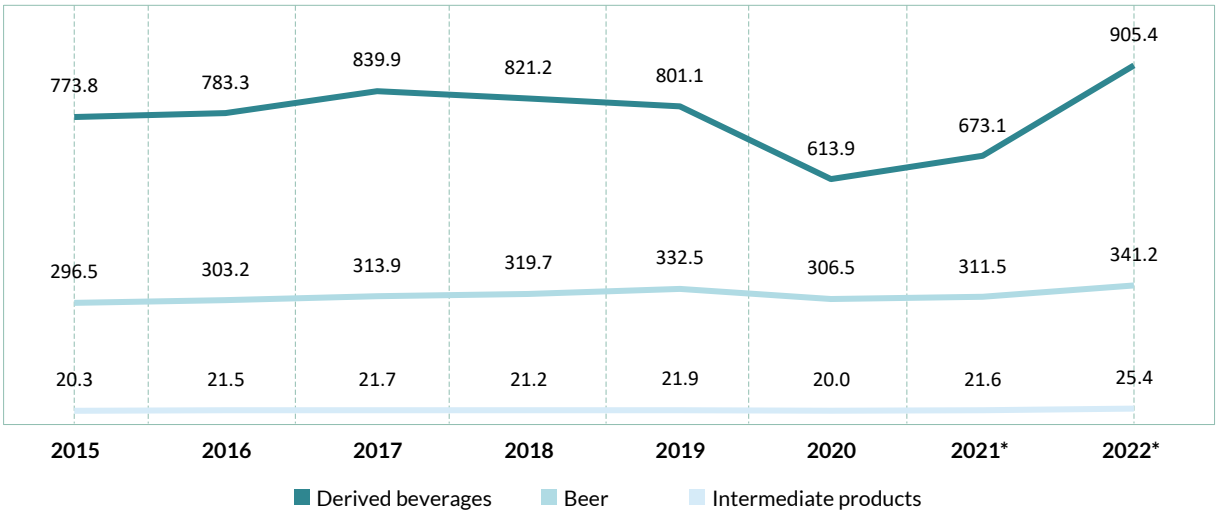
* Provisional data

SOURCE: Tax Agency (Annual Tax Collection Report 2022).

Leaving this aside, between 2015 and 2022 there is a general upward trend in the volume of alcohol from beer, and a stable situation for alcohol from derived beverages and intermediates. Wine alcohol shows an initial downward trend with a drop to minimum values in 2020 (110.7 million litres of pure alcohol) and then a strong rebound to 176.5 million litres in 2022, the highest in this historical series and well above the values of any previous year (Figure 27).

Alcohol tax revenue recorded a significant increase in 2022 after declines due to the Covid-19 pandemic that affected revenue in 2020 and 2021. The strong increase in revenue observed in 2022 is particularly noticeable for derived beverages: 34.5% more compared to 2021 and 13% more compared to what was collected in the year before the pandemic (2019). Alcohol tax revenues in 2022 reach the highest values in the historical series studied for the 3 types of beverages taxed on alcohol (Figure 28).

FIGURE 28. Tax revenues by type of alcoholic beverage (million €). Spain, 2015-2022.



Wine does not appear in this figure because its special tax is zero..

SOURCE: Tax Agency (Annual Tax Collection Report 2022).

Regarding the **selling price of alcoholic beverages**, information is available for beer and derived beverages. In 2022, the average price per litre of beer is 2.05 euros, while the average price per litre of derived beverages is 13.10 euros/litre. Average prices of alcoholic beverages follow a slight upward trend between 2015 and 2022, although the most notable increase is observed in the last year of the series. Compared with the average price in 2021, in 2022 beer became 6.4% more expensive and the average price of derived beverages rose by 2.7% (Table 49).

As can be seen in Table 48, derived beverages are taxed at a much higher rate than beer, so they generate much more tax revenue than beer despite lower sales volumes (Figure 29).

TABLE 49. Retail se prices of beer and derived beverages (€). Spain, 2015-2022.

	2015	2016	2017	2018	2019	2020	2021*	2022*
Beer								
Retail selling price (€/litre)	1.81	1.82	1.81	1.81	1.86	1.92	1.93	2.05
Price before tax	1.40	1.41	1.40	1.40	1.45	1.49	1.50	1.60
VAT	0.31	0.32	0.31	0.31	0.32	0.33	0.33	0.36
Special Tax	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Derived beverages								
Retail selling price (€/litre)	12.30	12.34	12.66	12.75	12.36	12.54	12.75	13.10
Price before tax	6.95	6.97	7.07	7.17	7.16	7.23	7.14	7.43
VAT	2.13	2.14	2.20	2.21	2.15	2.18	2.21	2.27
Special Tax	3.21	3.23	3.39	3.37	3.06	3.13	3.40	3.40

* Provisional data.

Source: Tax Agency (Annual Tax Collection Report 2022).

6 Presence of alcohol metabolites in wastewater in some territories

This chapter presents the results obtained by applying wastewater analysis for epidemiological purposes to monitor substance abuse in various locations in a total of 10 Autonomous Regions (Table 63). These results have been obtained in the framework of a research project funded by the Government Delegation for the National Plan on Drugs and are part of an indicator that has been used by the EMCDDA for more than 10 years[2].

This is a research study that does not claim to represent the consumption in the country, only in some samples at certain treatment plants. The results should not be extrapolated to the national total.

6.1 Methodology

In this study, wastewater samples were taken at different Spanish wastewater treatment plants (WWTPs) during a full week (generally starting on a Tuesday and ending on a Monday) during the spring months of 2021, ensuring that each sample was representative of a full day (24 h composite sample) at a total of 26 WWTPs (see Table 50). In addition, a second campaign was conducted at 9 WWTPs for one week in the autumn of the same year (in orange and labelled as B in the graphs in this section).

In order to determine the concentration of ethanol in each of the samples, its metabolite ethyl sulphate was measured by a direct injection method in the LC-MS/MS system. The concentrations were then converted into mass of metabolite excreted per day and standardised to 1000 inhabitants, using the wastewater flow received by each WWTP during the sampled day and the population served by the WWTP (standardised daily load). This standardised daily load was finally transformed into estimated use of pure substance based on knowledge of metabolism of the substance and its excretion pathway(s).

2 This work has been possible thanks to the collaboration of all the entities and town councils responsible for the management of wastewater treatment plants, which is essential for carrying out these studies, and to the project "Exploration of wastewater as a complementary, rapid and objective indicator of the consumption of substances of abuse" funded by the 2020 call for research projects of the Government Delegation for the National Plan on Drugs (File No. 2020I009)". The team of the University of Santiago de Compostela would also like to thank the funding of the RIAPAd network (https://riapad.es/, ref. RD21/0009/0012) through the call for RICORS networks of the Carlos III Health Institute- NexGenerationEU - PRTR.

TABLE 50. Coded list of the WWTPs analysed.

Code	Weeks sampled	Size	Code	Weeks sampled	Size
AND-1	1	G	CVA-3	2	M
BAL-1	1	G	CVA-4	2	MG
CAN-1	1	G	CVA-5	1	G
CAT-1	2	MG	CVA-6	1	P
CAT-3	1	MP	EUS-1	2	G
CAT-4	2	M	EUS-2	2	MG
CAT-5	1	M	EUS-3	1	MP
CAT-6	1	M	GAL-1	1	MP
CL-1	1	M	GAL-2	2	M
CL-2	1	MP	MAD-1	1	MG
CLM-1	1	M	MAD-2	2	MG
CVA-1	1	P	MAD-3	1	G
CVA-2	1	M	MAD-4	2	G

Code: corresponds to the initials of the Autonomous Region followed by a randomly selected number, AND: Andalusia, BAL: Balearic Islands, CAT: Catalonia, CL: Castile and Leon, CLM: Castilla-La Mancha, CAN: Canary Islands, CVA: Valencia, EUS: Basque Country, GAL: Galicia, MAD: Madrid, NOTES: there is no CAT-2, as it is assigned to a WWTP not sampled in 2021, CVA-4 actually corresponds to 2 WWTPs, which as they are connected must be assessed as a whole.

Population size served by the WWTP: MP < 10,000 inhabitants; 10,000 < P < 50,000 inhabitants; 50,000 < M < 200,000 inhabitants; 200,000 < G < 500,000 inhabitants; MG > 500,000 inhabitants.

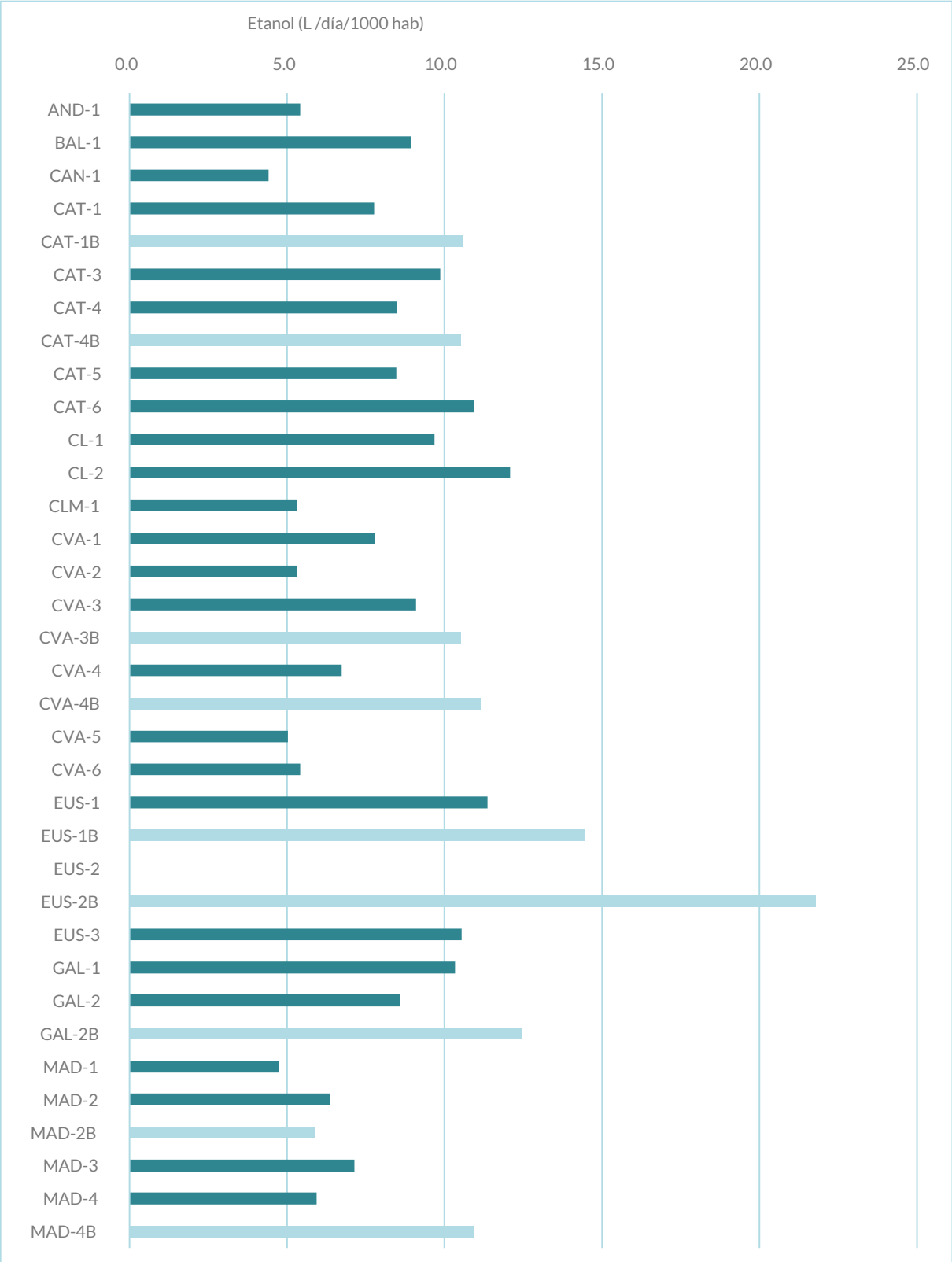
SOURCE: ESAR-Net.

Further information on the methodology of wastewater analysis for epidemiological purposes, its strengths and limitations can be found in references [41, 42]. An inter-laboratory exercise is carried out every year by the laboratories participating in the analysis to ensure the proper functioning of the analytical methods used and the comparability of the results obtained [43]. The ESAR-Net network had already carried out a pilot study in 2018 [44, 45, 46] that included 17 WWTPs from 7 Autonomous Regions sampled during one week in spring of that year, which will be used in this report in a comparative manner, although it should be borne in mind that the population studied in both cases is not the same and therefore the conclusions of the comparison should be taken with caution. Furthermore, in some cases, reference will be made to 4 Spanish locations (southern Barcelona and its metropolitan area, Valencia and its metropolitan area, Castellón and Santiago de Compostela), selected for participating annually since 2011 in the exercises organised by the SCORE network (https://score-network.eu) and EMCDDA, available on its website [47, 48]. In this case, the data also correspond to a single campaign carried out in the spring of each year and it is important to note that the data published by EMCDDA correspond to normalised daily load per population (without converting to consumption).

6.2 Results

The average estimated ethanol consumption values for each season are presented below. The average is presented instead of the mean to avoid the bias caused by the different pattern of use on weekends compared to weekdays for several of the substances considered.

FIGURE 29. Estimated average ethanol consumption in the WWTPs studied in 2021.



In green: spring campaign. In blue: autumn campaign. EUS-2 data discarded as aberrant data.

SOURCE: ESAR-Net.

As can be seen in Figure 29, the average weekly ethanol consumption in the different locations ranges from 4.4 to 22 L/day/1,000 inhabitant, with the overall average at 8.8 L/day/1,000 inhabitant. In the 2018 study [41], the average was 10 L/day/1,000 inhabitant, suggesting some decrease in consumption, although as mentioned, the different populations studied in 2018 and 2021 need to be taken into account.

In terms of weekly patterns, ethanol consumption increases in all locations during the weekend, ranging from 4% to 88% (average increase: 45%). This shows that, despite the mobility restrictions still in place in 2021 due to the pandemic, the pattern of recreational alcohol consumption was maintained. Furthermore, when comparing the data from the autumn versus the spring campaign, the average consumption increased in 7 of the 8 WWTPs for which data are available in both periods.

7 Problem drinking

7.1 Problem or at-risk alcohol consumption

In addition to the prevalence of alcohol consumption, it is necessary to know the number and characteristics of people with problem or risk drinking. This type of drinking presents a challenge in the short and medium term in terms of service provision and public health, so it is important to identify its characteristics and the population groups most vulnerable to its possible effects and consequences.

Risky drinking is a pattern of alcohol consumption that increases the likelihood of negative consequences for the drinker or his or her environment. It includes, for example, high weekly or daily consumption, acute alcohol intoxication, *binge drinking* or all those behaviours that may lead to dependence or other associated problems.

Situations in which any alcohol consumption is considered risky, such as consumption during pregnancy and breastfeeding, in persons under 18 years old, with mental health problems, with a family history of alcohol dependence, consumption associated with other substances or medicines that interact with alcohol, and consumption when performing activities that require concentration or psychomotor skills, are not mentioned in this section, as any alcohol consumption is considered to be hazardous, or is legislated, as in the case of driving a vehicle.

Currently, different ways of measuring risky alcohol consumption are commonly used, such as screening scales, by average alcohol consumption or by certain drinking patterns, such as *binge drinking*.

7.2 At-risk alcohol consumption according to the AUDIT scale applied in surveys

In 1982, the WHO developed a simple screening instrument capable of detecting alcohol-related problems. This instrument is the AUDIT scale [30], which stands for Alcohol Use Disorders Identification Test, and has been validated in Spain by several researchers [31, 32, 33].

It is a self-administered questionnaire consisting of 10 questions. The first 3 questions refer to the quantification of alcohol consumption (quantity, frequency), questions 4 to 6 refer to drinking behaviour or attitude, questions 7 and 8 assess the existence or occurrence of adverse reactions and the last two questions refer to problems related to alcohol consumption. The questionnaire is designed to be answered by those who have consumed alcohol in the last year.

The Spanish Alcohol and Drug Survey (EDADES), in its 2009, 2013, 2018, 2020 and 2022 editions, included the AUDIT scale with the aim of finding out the extent of problem drinking in the general population (15-64 years old). Until the 2020 edition, those who scored 8 points or more on the AUDIT scale were considered to be at risk of alcohol misuse. Taking into account national recommendations [25], as well as validations carried out in our country [31, 32, 33], from the 2020 edition onwards, those who score 8 or more points on the AUDIT scale in men and 6 or more in women are considered to have a risky alcohol consumption. In order to be able to assess the evolution, previous years were recalculated with the same cut-off points.

In the EDADES 2022 sample, of the 20,117 people who admitted to having consumed alcohol in the last year, 19,195 answered the AUDIT scale questions (95.4%). Using this scale, the prevalence of risky alcohol consumption (≥8 points in men and ≥6 in women) in the Spanish population aged 15-64 years old stands at 6.0% (7.2% in men and 4.8% in women), which allows us to estimate that in 2022 there were approximately 1,900,000 risky alcohol consumers in Spain (1,140,000 men and 760,000 women) (Table 51).

TABLE 51. Percentage of at risk alcohol consumers (AUDIT ≥6 Females and AUDIT ≥8 Males), in the population aged 15-64 years old. Spain, 2009-2022.

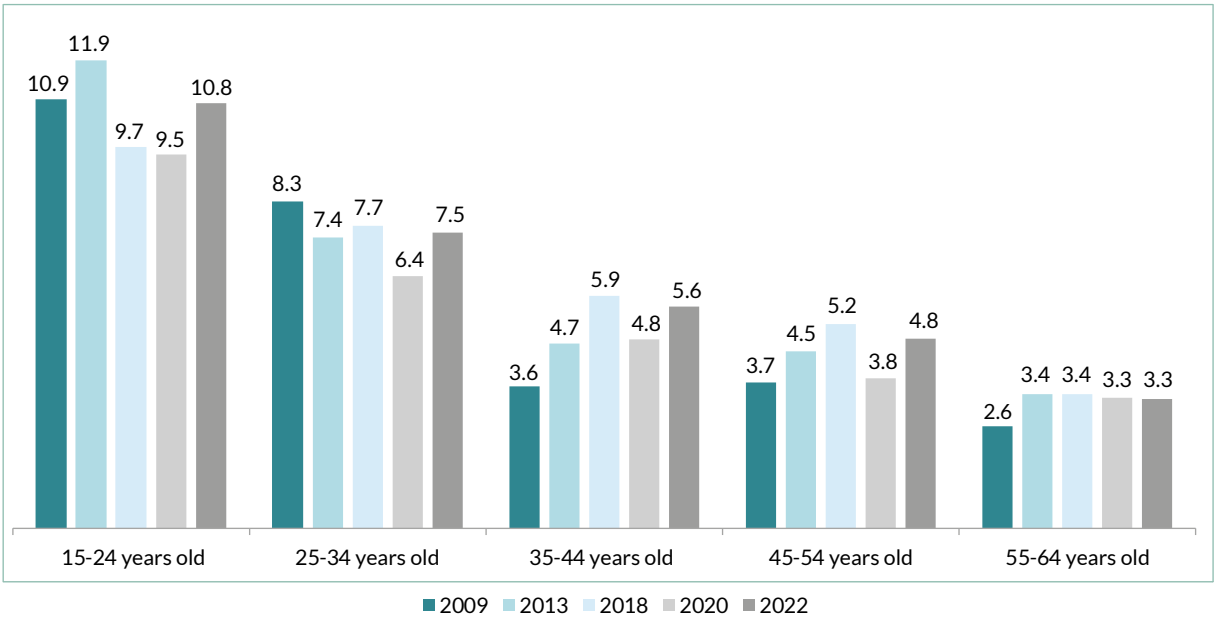
	Total	Men	Women
2009	5.8	8.0	3.4
2013	6.1	7.9	4.2
2018	6.2	7.6	4.7
2020	5.2	6.7	3.7
2022	6.0	7.2	4.8

AUDIT: Alcohol Use Disorders Identification Test.

SOURCE: OEDA. Survey on Alcohol and Drugs in Spain (EDADES).

By age group, risky drinking is more prevalent among younger age groups, with the percentage of risky drinkers decreasing with increasing age. In 2022, 10.8% of 15–24-year-olds show risky alcohol consumption compared to 3.3% of those aged 54 and over (Figure 30).

FIGURE 30. Prevalence of risky drinking (AUDIT≥8 in males and AUDIT≥6 in females) among the total population aged 15-64, by age (%). Spain, 2009-2022.



SOURCE: OEDA Survey on Alcohol and Drugs in Spain (EDADES).

Considering the population that has consumed alcohol in the **last year**, 8.3% show a risky consumption, a value that reaches 9.2% among male alcohol consumers and drops to 7.2% among female consumers. By age group, in 2022, 14.8% of young people aged 15-24 who consumed alcohol in the last year show risky alcohol consumption, compared to 4.8% of consumers aged 54 and over.

In terms of **sex**, it is important to note that, in 2022 among the youngest, the prevalence of hazardous alcohol consumption is higher among females than among males. In fact, among those who have consumed alcohol in the last year, women aged 15-24 are the group with the highest prevalence of risky drinking (12.4%, compared to 9.3% among men of the same age). However, as age increases, these gender differences are reversed, with risky consumption being much lower among women than among men in the older age group. Thus, in those over 54 years old, 5.4% of men and 1.2% of women have a risky alcohol consumption (Table 52).

TABLE 52. Percentage of risky alcohol consumers* among the total population aged 15-64, by age and sex. Spain, 2009, 2013, 2018, 2020 and 2022.

	15-64 years old			15-24 years old			25-34 years old			35-44 years old			45-54 years old			55-64 years old		
	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W
2009	**5.8**	8.0	3.4	**10.9**	12.4	9.4	**8.3**	11.3	5.0	**3.6**	5.6	1.6	**3.7**	5.9	1.5	**2.6**	4.8	0.5
2013	**6.1**	7.9	4.2	**11.9**	13.0	10.7	**7.4**	9.9	4.9	**4.7**	6.5	2.8	**4.5**	5.6	3.5	**3.4**	5.9	0.9
2018	**6.2**	7.6	4.7	**9.7**	9.8	9.6	**7.7**	9.3	6.2	**5.9**	8.0	3.8	**5.2**	6.6	3.8	**3.4**	5.0	1.9
2020	**5.2**	6.7	3.7	**9.5**	10.0	9.1	**6.4**	7.7	5.0	**4.8**	6.3	3.1	**3.8**	5.5	2.1	**3.3**	5.1	1.6
2022	**6.0**	7.2	4.8	**10.8**	9.3	12.4	**7.5**	8.1	6.9	**5.6**	7.5	3.8	**4.8**	6.7	2.9	**3.3**	5.4	1.2

T=Total, M=Men, W=Women.

AUDIT (Alcohol Use Disorders Identification Test) ≥8 Males y ≥6 Females.

SOURCE: OEDA. Survey on Alcohol and Drugs in Spain (EDADES).

Finally, according to EDADES 2022, the **profile of the risky drinker** is, in general, that of a male, single, 36 years old, with secondary education, who is working. With regard to risk patterns, 40.7% report having been drunk in the last 30 days and 77.1% report having indulged in *binge drinking* in the last month. In addition, 38.2% reported having used illegal drugs in the same period.

Of the total number of people aged between 15 and 64 who have a risky alcohol consumption, 39.9% are women.

Analysed separately by sex, the **profile of women who show this risk consumption** is that of a single woman, aged 31.7 years old, with secondary or university education and who is working. 34.2% have been drunk in the last month, 69.5% have indulged in *binge drinking* in the last 30 days and 32.5% have consumed illegal drugs in the same period.

The **profile of the male risk drinker** is 39 years old, single, with secondary education and working. He presents risk patterns to a greater extent than women, with 44.9% having been drunk in the last month, 82.2% having indulged in *binge drinking* in the last 30 days and 42.0% having consumed illegal drugs in the same period.

7.3 At risk alcohol consumption according to average alcohol consumption

Another method of estimating risky alcohol consumption is established in the 1st Conference on Prevention and Health Promotion in Clinical Practice in Spain [26], which considers risky alcohol consumption when any of the following criteria is met:

- **> 40 g/d (4 SDUs/day) in men and > 20-25 g/d (2-2.5 SDUs/day) in women.**
- **> 28 SDUs/week in men and > 17 LEU/week in women.**

Quantification of consumption in SDUs is currently the reference method in most levels of care (primary, specialised and hospital), as it allows rapid quantification of consumption and easy conversion into grams of pure alcohol.

In the EDADES 2022 survey, according to the calculation of *Binge Drinking Units* consumed after analysing the answers to the questions asking about the quantity and type of drinks consumed in the last 7 days, it is estimated that 3.9% of the population aged 15-64 years old would have **consumed at risk**, with higher percentages among men (4.3%) than among women (3.4%). The profile of the risk drinker defined according to this criterion would be that of a man (64.1%) with an average age of 36 years old, with secondary education (75.4%).

In 2020, a study was conducted among 1,443 **people over 64 years old**. All interviews were conducted before the publication of Royal Decree 463/2020 of 14th March, declaring a state of alarm for the management of the health crisis situation caused by COVID-19. Among people aged 65 and over who reported having consumed alcohol in the last 12 months and answered the AUDIT questionnaire, 1.2% had a possible risky alcohol consumption (2.2% in men, while no women in the sample had this condition). This implies that 0.7% of the Spanish population aged 65 and over could present this problem of risky alcohol consumption. In people aged 15 to 64 years old, possible risk drinking presents a higher percentage among the total population of that age (6%).

8 Consequences of alcohol consumption

8.1 Admissions to treatment for alcohol consumption

The Admissions to treatment for psychoactive substance use indicator provides information on the number and characteristics of persons entering outpatient treatment for psychoactive substance abuse or dependence (legal and illegal drugs, except tobacco) throughout Spain, by Autonomous Region and in a given year. This indicator collects annual information since 1987.

Currently, all Autonomous Regions/Cities report this indicator, but information on alcohol is collected systematically in all of them only since 2008; in previous years, information on alcohol was only available for some Autonomous Regions/Cities. In order to interpret the data, it is necessary to take into account that part of the treatments for alcohol abuse or dependence are carried out in facilities other than the drug dependence and addiction care network, so this indicator only reports on part of the treatments for alcohol consumption disorders.

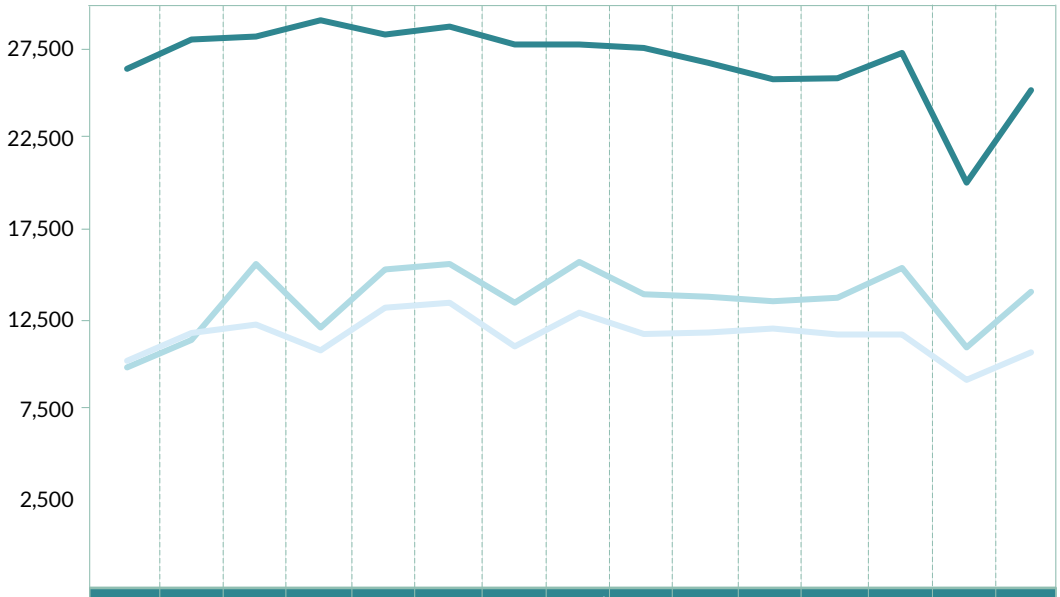
A detailed protocol is available describing the variables, the psychoactive substances collected and the inclusion and exclusion criteria. This information is available on the website of the National Plan on Drugs (PNSD) [34]:

https://pnsd.sanidad.gob.es/en/profesionales/sistemasInformacion/sistemaInformacion/indicadores.htm

The main results for the Alcohol Treatment Admissions Indicator from 2008 onwards are presented below.

In 2021, the number of admissions to treatment for alcohol abuse or dependence was 25,140 (Figure 32). Overall, the number of admissions to treatment has not changed significantly over time. Notably, in 2020, coinciding with the restrictions related to the Covid-19 pandemic, there was a very noticeable decrease in the number of admissions, followed by a significant increase in 2021, although without reaching the values of the pre-pandemic year.

FIGURE 31. Number of admissions to treatment for alcohol abuse or dependence (absolute numbers). Spain*, 2008-2021.



	2008	2009	2010	2011	2012	2013	2014	2014*	2015	2016	2017	2018	2019	2020	2021
First treatments	9,395	10,924	15,126	11,612	14,816	15,121	12,977	15,240	13,457	13,319	13,060	13,243	14,907	10,501	13,575
With prior treatment	9,753	11,288	11,764	10,350	12,714	12,978	10,571	12,418	11,254	11,323	11,556	11,224	11,215	8,705	10,234
Total	26,318	27,958	28,111	29,014	28,234	28,652	27,658	27,658	27,469	26,655	25,753	25,796	27,209	20,017	25,140

* Data estimated for the whole of Spain because some Autonomous Regions have not collected the prior treatment variable.
The sum may or may not coincide with the total due to the existence of cases with unknown values in the prior treatment variable.

SOURCE: OEDA. Treatment Demand Indicator for psychoactive substance use.

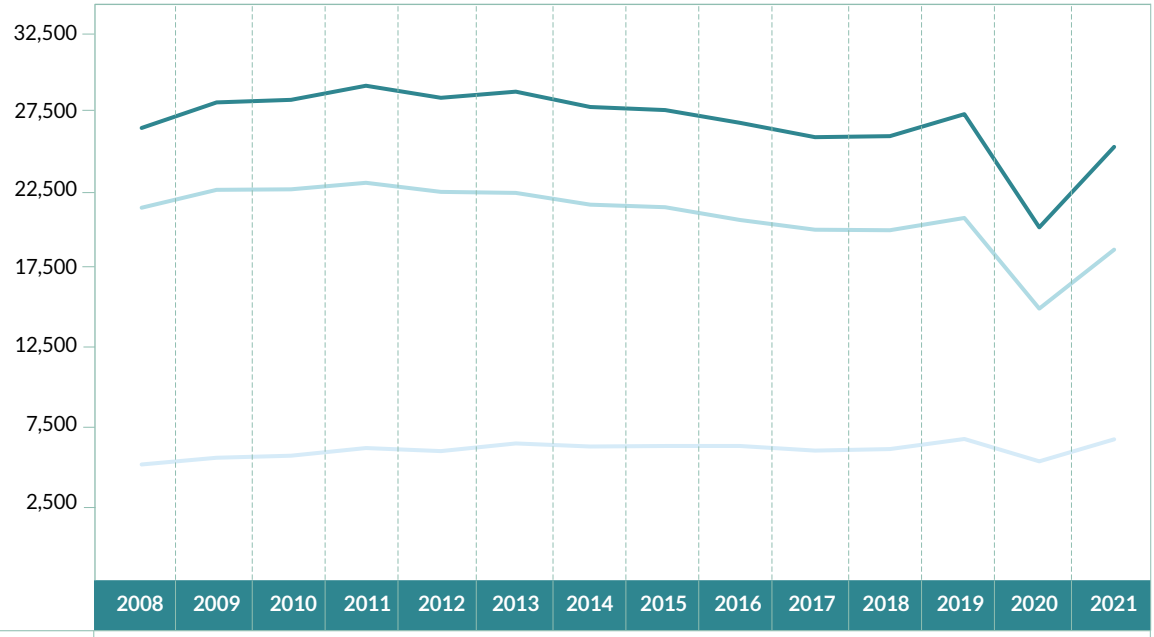
Alcohol is responsible for 36.2% of treatment admissions in 2021. In addition, it is present in a large part of poly-consumption patterns.

These 25,140 people admitted to treatment for alcohol abuse or dependence can be contrasted with the 1,860,000 at-risk alcohol users, including those who have developed an alcohol consumption disorder.

The **profile of those admitted to alcohol treatment** is that of a male (74.0%) aged 47.3 years old who lives with his own family (partner and/or children) (23.2%) or alone (22.9%), who attends on his own initiative (37.1%) or referred by his GP (24.8%) and who consumes alcohol every day (58.1%). The majority (74.6%) do not use other drugs. Among those who do use other substances, the use of cocaine (64.9%) and cannabis (50.4%) (secondary drugs, other than the one for which they were admitted to treatment) stand out.

From 2005 to 2008, an increase in admissions to treatment for alcohol abuse or dependence was observed in **both women and men** (Figure 32). This increase may be due to improved reporting in the early years of data collection on this substance. Since 2009 the number of women admitted to alcohol treatment has slightly increased and the number of men admitted to alcohol treatment has slightly decreased except for the steepest decrease in 2020, in both sexes, due to the Covid-19 pandemic.

FIGURE 32. Number of people admitted to treatment for alcohol abuse or dependence according to sex (absolute numbers). Spain*, 2008-2021.



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Men	21,258	22,405	22,449	22,848	22,257	22,198	21,470	21,294	20,490	19,866	19,822	20,620	14,854	18,593
Women	4,952	5,375	5,498	6,008	5,815	6,292	6,101	6,128	6,137	5,845	5,943	6,572	5,149	6,533
Total	26,318	27,958	28,111	29,014	28,234	28,652	27,658	27,469	26,655	25,753	25,796	27,209	20,017	25,140

* Data estimated for the whole of Spain because some Autonomous Regions have not collected the prior treatment variable.
The sum may or may not coincide with the total due to the existence of cases with unknown values in the prior treatment variable.

Source: OEDA. Treatment Demand Indicator for psychoactive substance use.

As for the main differences between men and women in people admitted to treatment for alcohol abuse, in women it is more frequent to have higher education (17.5% vs. 9.3% in men), to be referred from hospitals, other health services or social services (22.9% vs. 16.7% in men), and to live only with their children (13.0% vs. 2.3% in men). In contrast, men are more likely to be working (46.8% vs. 39.3% in women) and to live with their partner and children or with their parents or family of origin (47.7% vs. 35.8% in women).

8.2 Alcohol consumption and hospital emergencies

In Spain, one of the indicators used to monitor the non-fatal health consequences of psychoactive substance use is the Indicator of hospital emergencies related to non-medical or non-therapeutic use of psychoactive substances [20].

Regarding the data collection mechanism, the controller in each Autonomous Region/City collects the information, based on an active, systematic, exhaustive and retrospective review of emergency medical records. A geographical area is selected and the hospitals located in it are monitored (excluding maternity wards, paediatric hospitals, specialised hospitals). Information is collected for one

week of each month, randomly selected from the Spanish Monitoring Centre for Drugs and Addictions; some Autonomous Regions carry out a continuous collection in some hospitals.

Annual information is available since 1987, although coverage is not complete, with year-to-year variations, both in terms of Autonomous Regions/Cities and the number of hospitals notified. In 2021, 16 out of 19 Autonomous Regions/Cities (all except Galicia, Ceuta and Melilla) reported to the indicator.

This indicator records substances for which the practitioner states in the medical record a direct link to the emergency. It should be borne in mind that, historically, this indicator only collected information in the case of alcohol appearing together with another substance, so that the figures recorded for alcohol-related episodes represented only partial data on the impact of alcohol consumption on the emergency services. In any case, alcohol is the legal psychoactive substance associated with the highest number of emergencies,

In 2017, within the working group of the State Information System on Drugs and Addictions (SEIDA), it was decided to revise the emergencies indicator. Among the proposed changes, it was established that hospital emergencies due to alcohol and hypnosedatives should also be recorded as single substances, as long as they were acute (not chronic) episodes. To avoid the impact that the recording of alcohol and hypnosedative emergencies as single substances may have on the historical series of the indicator, we first present results without considering these episodes and then analyse the emergencies with these episodes included.

More detailed information on this indicator is available on the National Plan on Drugs website [34]:

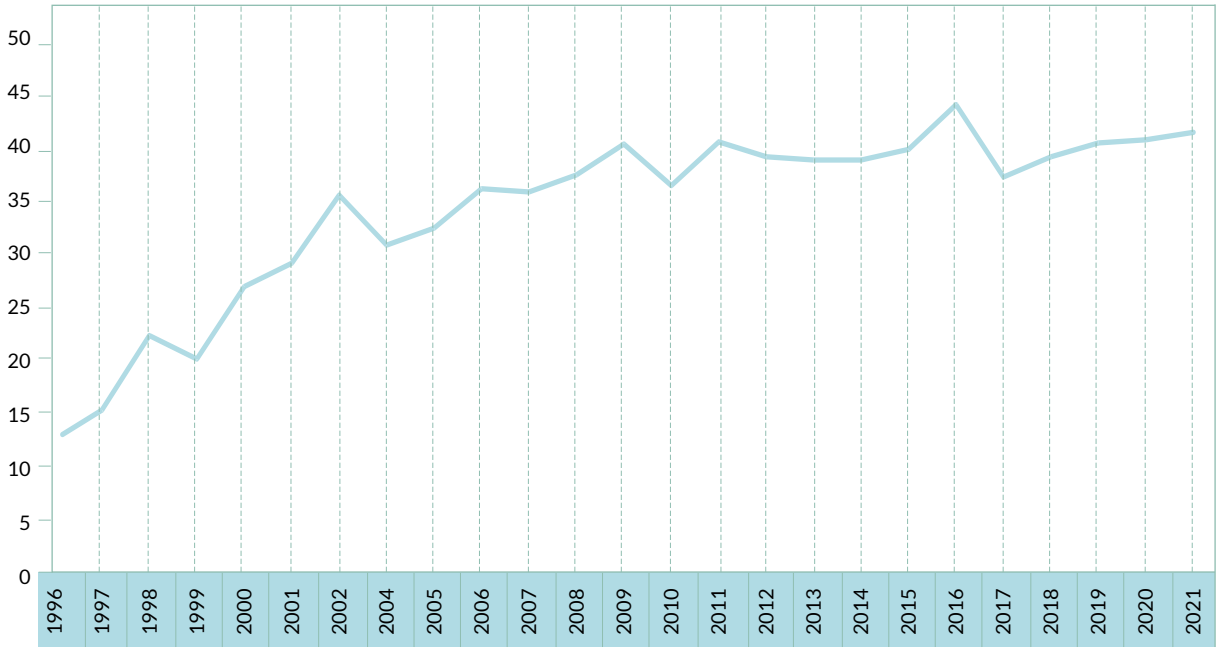
https://pnsd.sanidad.gob.es/en/profesionales/sistemasInformacion/sistemaInformacion/indicadores.htm

- **Without considering emergencies due to alcohol and hypnosedatives as single substances**, we obtain the following results:

In 2021 the sample included 6,209 hospital emergencies related to non-therapeutic or non-medical use of any drug[3]. In these emergencies, alcohol was present with other substances in 41.4% of the total.

3 In accordance with the protocol for this indicator, this figure corresponds to the episodes found in the review of emergencies occurring during a randomly selected week for each month of the year in the hospitals selected by the Autonomous Regions that participated in the data collection in 2021.

FIGURE 33. Drug-related hospital emergencies where alcohol** is present (%). Spain* 1996-2021.



* Autonomous Regions that declare the Emergencies indicated.
** Alcohol is only recorded when accompanied by another substance.

SOURCE: OEDA. Indicator Hospital emergencies in users of psychoactive substances.

With regard to the evolution of episodes related to the consumption of alcohol together with other substances, an increase in hospital emergency episodes was observed up to 2009, followed by a stabilisation of this type of event in recent years (Figure 34).

Of these 6,209 emergencies related to non-medical use of psychoactive substances, the substances with the greatest presence are cannabis, which was related to 44.5% of emergencies; followed by alcohol, present together with other psychoactive substances in 41.4% of emergencies due to substance use; and cocaine, which was related to 40.3% of the episodes analysed.

In 2021, with respect to alcohol-related episodes by sex, alcohol was related to 42.1% of emergencies in men and 39.4% of emergencies in women.

- Adding **alcohol and hypnosedative emergencies as single substances**, the results are as follows:

In 2021, 12,476 hospital emergencies related to non-medical or non-medical drug use were reported to the indicator[4].

4 In accordance with the protocol for this indicator, this figure corresponds to the episodes found in the review of emergencies occurring during a randomly selected week for each month of the year in the hospitals selected by the Autonomous Regions that participated in the data collection in 2021.

Of these 12,476 emergencies related to non-medical use of psychoactive substances, alcohol was the most frequent substance, accounting for 55.5% of emergencies. Analysing emergencies separately according to sex, alcohol is by far the most frequent substance in substance-related emergencies in men (60.7%), and the second most frequent substance (46.5%) in women, after hypnosedatives (49.7%).

The **profile of people attending hospital for an alcohol-related emergency** is that of a man (69.6%) with an average age of 37.6 years old. A total of 77.3% of the episodes ended with medical discharge, 10.3% with voluntary discharge and 9.9% with hospital admission.

The **symptoms presented** by people seen in the emergencies for the consumption of alcohol as the only psychoactive substance were mainly vomiting or nausea (25.8%), agitation, aggressiveness and irritability (22.1%), loss of consciousness, syncope or coma (19.3%), anxiety (18.5%), and to a lesser extent abdominal pain (9.4%).

8.3 Alcohol consumption and mortality

8.3.1 Specific Register of Mortality due to Acute Drug Reaction (OEDA)

This is a Register of Mortality whose goal is to collect information on deaths, with judicial intervention, where the direct and main cause of death is an acute adverse reaction following the non-medical, intentional use of psychoactive substances.

The primary source of information comes from forensic and toxicological sources, such as the Forensic Anatomical Institutes, Forensic Doctors, National Institute of Toxicology and Institutes of Legal Medicine, which report the data to the autonomous region or city in which they are located.

The population coverage on a geographical level has been progressively increasing. In 2021, the judicial districts of all the Autonomous Regions and Cities reported data, with the exception of Aragon, which has only reported data for 75% of the judicial districts. The coverage of this indicator in 2021 is estimated to be 99.4% of the Spanish population (89.1% in 2019).

This indicator became systematically operational in 1990, although partial information has been available since 1983. Information on deaths due to acute reaction to opioids and to cocaine was initially collected, but many other psychoactive substances are now also reported.

More detailed information on this indicator is available on the National Plan on Drugs website (PNSD) [34]:

https://pnsd.sanidad.gob.es/en/profesionales/sistemasInformacion/sistemaInformacion/indicadores.htm

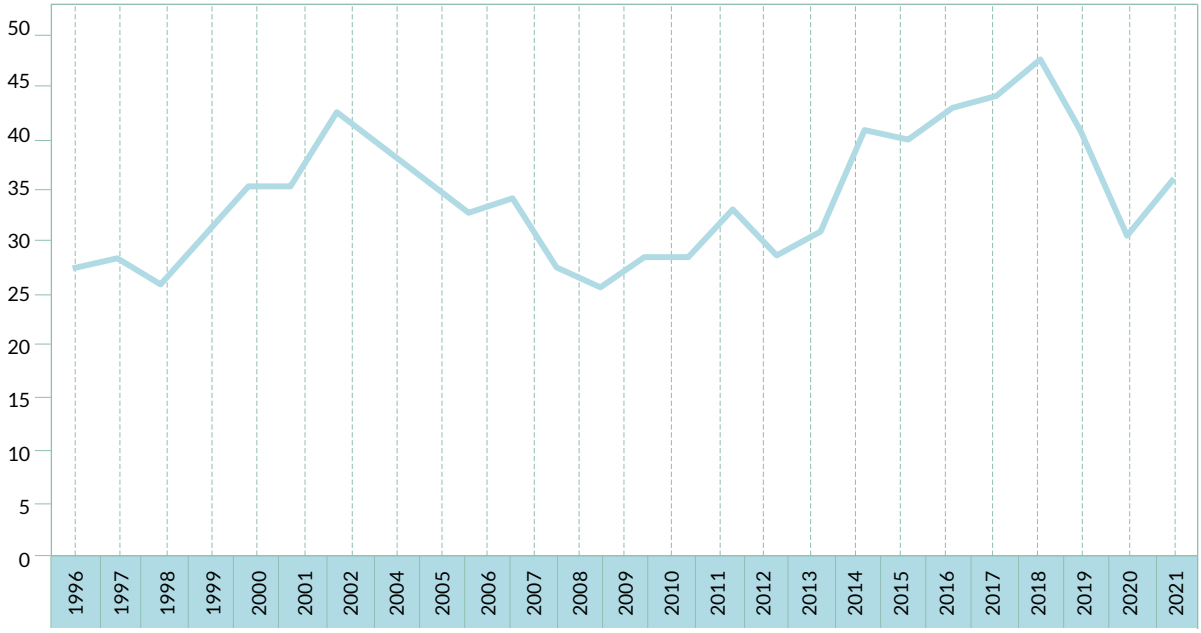
In recent years there has been an increase in the number of deaths associated with drug use in Spain, mainly due to three reasons: an increase in the national coverage of the indicator (99.4% in 2021), an improvement in the reporting of deaths due to suicide, and an increase in the age range considered, which from 2020 includes all ages.

In 2021, 1046 deaths were reported nationally, although toxicological information disaggregated by type of substance is available for 910 cases.

Among the deceased, 78.0% were male, the average age was 46.7 years old, and 26.9% showed signs of suicide, this percentage being much higher among females (50.3%) than among males (19.7%).

In the majority (88.6%) of cases with toxicological information, the use of more than one substance was detected. The substances present in the deceased are mainly hypnosedatives, followed by opioids, cocaine and alcohol. It is important to note that alcohol is only recorded when it appears together with another substance (as established in the reporting protocol) and never when it appears as a single substance.

FIGURE 34. Percentage of alcohol detection** in the toxicological analysis out of the total number of deaths due to acute reaction after psychoactive substance use (%). Spain*, 1996 - 2021.



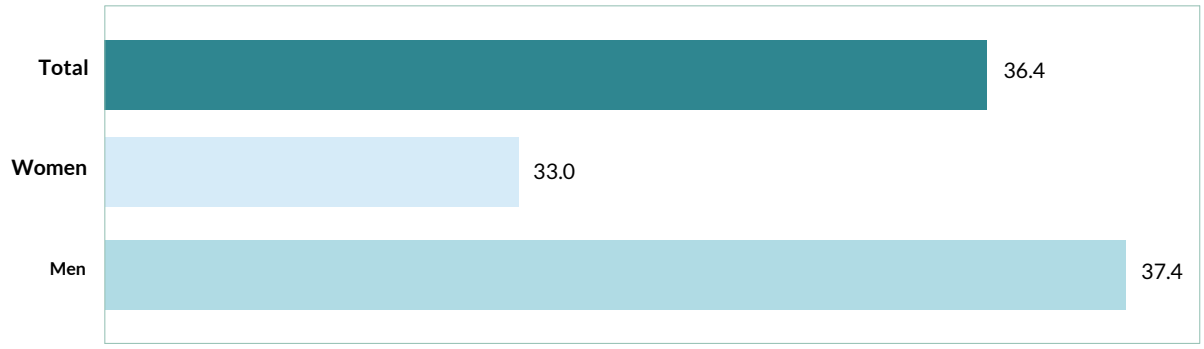
*Data are included for all geographical areas monitored by the indicator and the cases in which a substance has been detected.
**Alcohol is only recorded when it appears together with another substance

SOURCE: OEDA. Indicator on Mortality due to acute reaction to psychoactive substances. Specific Mortality Register.

Alcohol has been present in deaths due to acute drug reaction in a range between 26% and 48% of deaths. In 2021, alcohol was detected in 36.4% of deaths with toxicological information (37.4% in men and 33.0% in women), which represents a rebound after the decreases observed in 2019 and 2020, but at levels much lower than the percentage obtained in 2018 (Figure 35).

Analysing by sex, differences are observed in the type of substance detected most frequently in deaths due to acute reaction after substance use (Figure 36). Alcohol is detected slightly more frequently in deaths due to acute reaction to substance use in men than in women.

FIGURE 35. Percentage of deaths in which alcohol** is detected as a percentage of the total number of deaths (with toxicological information) due to acute reaction after consumption of psychoactive substances, by sex. Spain*, 2021.



*Data are included for all geographical areas monitored by the indicator and the cases in which a substance has been detected.
** Alcohol is only recorded when it appears together with another substance.

SOURCE: OEDA. Indicator on Mortality due to acute reaction to psychoactive substances. Specific Mortality Register.

8.3.2 Mortality Attributable to Alcohol (MAA) in Spain 2001-2021

Estimating alcohol-attributable mortality in the population is an essential component of understanding the overall impact of alcohol on human well-being, and can be used to determine priorities, allocate public health resources and evaluate alcohol-related policies [35].

In order to obtain estimates of alcohol-attributable mortality in Spain and to be able to identify the need for interventions and policies in this field, a study funded by the DGPNSD has been carried out. In this study, the cause-specific approach is used to estimate the total number of alcohol-attributable deaths (MAA), which involves first estimating alcohol-attributable deaths for several specific causes selected for their accepted causal relationship with alcohol consumption, e.g. alcoholic liver disease, oesophageal cancer, tuberculosis or pancreatitis, and then aggregating them. Eighteen specific causes of death partially attributable to alcohol were considered, and the selection was based on the most recent international literature, mainly systematic reviews and meta-analyses, assessing the risk of developing certain diseases and health problems associated with alcohol consumption [36, 37]. In addition, all causes of deaths directly attributable to alcohol that are not part of broader causes partially attributable to alcohol were included. The number of MAA for a given specific cause was estimated by multiplying the number of deaths registered for that cause, extracted from the mortality register of the National Statistics Institute (INE), by the population attributable fraction (PAF) for alcohol for that cause or category of death. The PAF for each cause of death was calculated by combining population prevalences of alcohol consumption (obtained from the National Health Survey and the European Health Survey in Spain), corrected for underestimation of consumption using alcohol sales records [28] with relative risk functions extracted from the most recent meta-analyses and reviews [1, 38, 39, 40]. In addition to the absolute number of alcohol-attributable deaths, other indicators of alcohol-attributable mortality (MAA) such as crude and age-standardised population rates and various age-standardised percentages were calculated. Rates are important in a context of population growth. The percentages allow estimating the contribution of alcohol to the overall risk of mortality and the contribution of the different causes of death and heavy drinking to the total risk of alcohol-attributable mortality.

The main results of the alcohol-attributable mortality study for the period 2001-2021 in Spain are presented below.

8.3.2.1 Average annual number of alcohol-attributable deaths (MAA)

In the first 21 years of the 21st century, 307,407 alcohol-attributable deaths (MAA) occurred in the population aged ≥15 years old living in Spain. Focusing on 2021, alcohol consumption caused 13,887 deaths. The most frequent causes of MAA were cancer (5,805), digestive diseases (5,303), and external causes (2,605) (Table 53).

In terms of their evolution, the average annual number of MAA remained practically stable between 2001-2004 and 2005-2009 at figures close to 16,000, then fell and has remained stable at figures between 13,400 and 13,900. Between 2001-2004 and 2021, MAAs for all categories of causes of death decreased considerably, except for MAAs due to cancer, which remained practically stable, and MAAs due to neurological and mental illnesses, which increased (Table 53). The three categories of causes of death that contributed the highest number of MAA in all the periods analysed were cancer, digestive diseases and external causes.

TABLE 53. Evolution of the average annual number of deaths attributable to alcohol[1] in the population aged 15 years old and over, by specific cause. Spain, 2001-2021.

Period	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021
	2020	2021	13.465	13.789	13.671	13.887
TOTAL	15,931	15,971	13,465	13,789	13,671	13,887
Cancer	6,124	6,049	5,860	5,946	5,798	5,805
Circulatory diseases	-20	404	-215	195	397	420
Infectious diseases	269	256	183	248	232	117
Metabolic diseases	-482	-473	-592	-558	-638	-599
Digestive diseases	6,819	6,711	5,894	5,383	5,156	5,303
Neurological/mental diseases	87	93	112	163	218	236
Other diseases	0	0	0	0	0	0
External causes	3,135	2,931	2,223	2,412	2,508	2,605

[1]The average annual number of MAA for a given cause is actually the balance between alcohol-caused and non-alcohol-caused deaths. A positive balance means that the number of deaths caused is greater than the number not caused and a negative sign means the opposite. In the case of metabolic diseases, the negative balance is due to diabetes deaths not caused by alcohol.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

As for the distribution of MAAs by sex (Table 54), in 2021, 78.3% of MAAs occurred in men, with few changes in this proportion over the study period. Overall, the evolution of the average annual number of MAAs over the period 2001-2021 has been fairly similar for men and women. However, there is a slight decrease in the average annual number of MAA due to cancer among men and a slight increase in women, and a significant decrease in the average annual number of MAA due to external causes in men and some increase in women. Moreover, in relative terms, the decrease in the average annual number of MAA due to digestive diseases appears to be greater in women. (Table 54).

TABLE 54. Evolution of the average annual number of deaths attributable to alcohol[1] in the population aged 15 years old and over, by sex and specific cause. Spain, 2001-2021.

Period	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021
Men						
TOTAL	12,632	12,597	10,390	10,732	10,683	10,871
Cancer	4,908	4,800	4,602	4,657	4,461	4,502
Circulatory diseases	-473	-187	-764	-379	-201	-156
Infectious diseases	222	209	148	190	181	95
Metabolic diseases	-43	-44	-99	-100	-119	-115
Digestive diseases	5,160	5,155	4,537	4,224	4,077	4,174
Neurological/mental diseases	68	72	85	118	164	174
Other diseases	0	0	0	0	0	0
External causes	2,790	2,593	1,880	2,023	2,120	2,196
Women						
TOTAL	3,299	3,374	3,076	3,057	2,988	3,016
Cancer	1,216	1,249	1,258	1,289	1,337	1,303
Circulatory diseases	453	591	549	574	598	576
Infectious diseases	47	46	35	59	51	22
Metabolic diseases	-439	-429	-492	-458	-518	-485
Digestive diseases	1,659	1,556	1,356	1,160	1,079	1,128
Neurological/mental diseases	19	21	27	45	54	62
Other diseases	0	0	0	0	0	0
External causes	345	339	343	388	388	409

[1]The average annual number of MAA for a cause is actually the balance between alcohol-caused and non-alcohol-caused deaths. A positive balance means that the number of deaths caused is greater than the number not caused and a negative sign means the opposite. In the case of metabolic diseases, the negative balance is due to diabetes deaths not caused by alcohol.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

Regarding the distribution of MAAs by age group (Table 53), the highest number was concentrated between 55 and 84 years old, which accounted for 64.2% of all MAAs in 2001-2009, 66.3% in 2010-2019 and 66.9% in 2021. Between 2001-2010 and 2011-2021 the number of MAAs decreased in all age groups between 15 and 84 years old, while it increased in the group aged ≥85 years old (Table 55). In relative terms the largest decrease between the two periods mentioned occurred in the 15-34 and 35-44 age groups and was mainly due to the decrease in the number of MAA due to external causes and digestive diseases, although the number of MAA due to cancer also decreased significantly. The average annual number of premature MAAs (<75 years old) fell from 11,402 in 2001-2010 to 9,040 in 2010-2019 and 9,010 in 2021.

TABLE 55. Evolution of the average annual number of deaths attributable to alcohol[1] in the population aged 15 years old and over, by specific cause and age groups. Spain, 2001-2021.

Age group	15-34 years old	35-44 years old	45-54 years old	55-64 years old	65-74 years old	75-84 years old	>=85 years old
2001-2009							
TOTAL	865	1,181	2,392	3,180	3,784	3,281	1,271
Cancer	30	183	794	1,395	1,737	1,427	516
Circulatory diseases	4	-16	-27	-87	-71	177	236
Infectious diseases	6	14	22	29	47	80	63
Metabolic diseases	-2	-4	-8	-30	-85	-160	-188
Digestive diseases	70	514	1,160	1,480	1,768	1,373	394
Neurological/mental diseases	11	10	12	11	15	19	11
Other diseases	0	0	0	0	0	0	0
External causes	744	481	438	382	374	366	237
2010-2019							
TOTAL	269	530	1,999	2,901	3,341	2,793	1,794
Cancer	19	101	636	1,345	1,708	1,361	732
Circulatory diseases	-2	-29	-71	-160	-111	18	344
Infectious diseases	3	6	17	23	32	57	79
Metabolic diseases	-1	-3	-9	-29	-68	-167	-297
Digestive diseases	23	198	1,029	1,391	1,415	1,106	477
Neurological/mental diseases	7	7	14	18	26	34	31
Other diseases	0	0	0	0	0	0	0
External causes	220	250	382	313	340	384	428
2020							
TOTAL	248	447	1,610	3,115	3,454	2,564	2,232
Cancer	19	85	477	1,389	1,743	1,229	856
Circulatory diseases	-3	-26	-60	-152	-53	106	584
Infectious diseases	3	5	18	22	40	51	92
Metabolic diseases	-1	-3	-8	-34	-70	-147	-374
Digestive diseases	17	136	740	1,481	1,374	916	491
Neurological/mental diseases	6	11	23	32	47	49	51
Other diseases	0	0	0	0	0	0	0
External causes	207	239	420	378	373	360	531
2021							
TOTAL	270	433	1,604	3,162	3,541	2,583	2,293
Cancer	13	75	439	1,383	1,763	1,256	876
Circulatory diseases	0	-22	-63	-178	-41	124	600
Infectious diseases	1	3	8	17	18	28	41
Metabolic diseases	-1	-2	-7	-38	-66	-133	-352
Digestive diseases	21	139	770	1,536	1,455	875	508
Neurological/mental diseases	8	9	20	35	49	56	60
Other diseases	0	0	0	0	0	0	0
External causes	229	232	437	407	362	379	559

[1]The average annual number of MAA for a cause is actually the balance between alcohol-caused and non-alcohol-caused deaths. A positive balance means that the number of deaths caused is greater than the number not caused and a negative sign means the opposite. In the case of metabolic diseases, the negative balance is due to diabetes deaths not caused by alcohol.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

The average annual number of MAAs by type of drinking, sex and time period can be seen in Table 56. In men, the highest number of MAAs in any period occurred in heavy drinkers (79-83%), followed by light/moderate drinkers and former regular drinkers. In women, on the other hand, the proportion of MAAs in heavy drinkers was lower (50-56%). Between the first and second decade of the 21st century, there was a decrease in the number of MAAs in heavy drinkers and ex-regular drinkers, and an increase in the number of MAAs in light/moderate drinkers in both men and women.

TABLE 56. Evolution of the average annual number of deaths attributable to alcohol in the population aged 15 years old and over, by sex and type of drinking. Spain, 2001-2021.

Period	2001-2004	2005-2009	2010-1014	2015-2019	2020	2021
MEN						
Total	12,618	12,582	10,382	10,715	10,667	10,868
Heavy drinkers[1]	10,443	10,279	8,502	8,622	8,547	8,661
Light/moderate drinkers[2]	1,010	1,123	1,094	1,269	1,289	1,382
Ex-regular drinkers[3]	1,165	1,180	786	824	832	825
WOMEN						
Total	3,354	3,422	3,078	3,053	2,986	3,020
Heavy drinkers[1]	1,749	1,720	1,557	1,639	1,653	1,646
Light/moderate drinkers[2]	657	767	942	851	785	833
Ex-regular drinkers[3]	947	935	579	563	548	540

Note: There are small discrepancies in the total figures with respect to Table 54 due to the way the results are obtained in the two tables. Specifically, to obtain the results in this table, the PAFs have been further stratified by the three types of drinker outlined below.

[1]Heavy drinkers: Persons who have consumed ≥60 g of pure alcohol (men) or ≥40 g of pure alcohol (women) per day in the last year.

[2]Light/moderate drinkers: Persons who have consumed alcoholic beverages in the past year but have consumed <60 g of pure alcohol (men) or <40 g of pure alcohol (women) on a daily basis.

[3]Ex-regular drinkers: People who have not consumed alcoholic beverages in the last year but have consumed alcoholic beverages at least 12 times in their life.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

The average annual number of MAAs by type of drinking and age group can be seen in Table 57. MAAs in ex-drinkers were concentrated in the groups aged ≥75 years old, those of heavy drinkers in the groups aged 65-74 years old and those of moderate light drinkers between 45 and 74 years old, although there was also a significant proportion in those under 45 years old.

TABLE 57. Evolution in the average annual number of alcohol-attributable deaths in the population aged 15 and over, by type of drinking and age group. Spain, 2001-2021.

Age group	15-34 years old	35-44 years old	45-54 years old	55-64 years old	65-74 years old	75-84 years old	>=85 years old
2001-2009							
TOTAL	863	1,181	2,392	3,180	3,795	3,293	1,286
Heavy drinkers[1]	457	792	1,838	2,567	3,024	2,345	1,060
Light/moderate drinkers[2]	401	361	477	479	374	69	-369
Ex-regular drinkers[3]	5	27	77	133	397	880	595
2010-2019							
TOTAL	269	530	2001	2,903	3,333	2,789	1,789
Heavy drinkers[1]	106	266	1,425	2,191	2,762	1,948	1,461
Light/moderate drinkers[2]	159	244	494	566	418	382	-185
Ex-regular drinkers[3]	4	20	81	146	153	459	513
2020							
TOTAL	249	447	1,612	3,117	3,445	2,559	2,225
Heavy drinkers[1]	96	222	1,142	2,355	2,865	1,765	1,755
Light/moderate drinkers[2]	149	208	400	601	427	398	-110
Ex-regular drinkers[3]	3	17	70	161	152	396	580
2021							
TOTAL	271	434	1,607	3,165	3,534	2,583	2,296
Heavy drinkers[1]	104	205	1,125	2,409	2,936	1,751	1,775
Light/moderate drinkers[2]	164	211	411	589	444	447	-50
Ex-regular drinkers[3]	3	18	71	166	154	384	570

Note: There are small discrepancies in the total figures with respect to Table 54 due to the way the results are obtained in the two tables. Specifically, to obtain the results in this table, the PAFs have been further stratified by the three types of drinker outlined below.

[1]Heavy drinkers: Persons who have consumed ≥60 g of pure alcohol (men) or ≥40 g of pure alcohol (women) per day in the last year.

[2]Light/moderate drinkers: Persons who have consumed alcoholic beverages in the past year but have consumed <60 g of pure alcohol (men) or <40 g of pure alcohol (women) on a daily basis.

[3]Ex-regular drinkers: People who have not consumed alcoholic beverages in the last year but have consumed alcoholic beverages at least 12 times in their life.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

8.3.2.2 Alcohol Attributable Mortality Rates

The annual average age-standardised MAA rates per 100,000 person-years by specific cause category and period are shown in table 58. In 2021, the overall rate of MAA was 32.9 per 100,000 person-years (py), with the highest rates corresponding, in that order, to cancer, digestive diseases and external causes. With regard to the evolution by periods, between 2001-2004 and 2021 the average annual rate of MAA decreased in relative terms by 34.7% and in absolute terms by 17.5 MAA per 100,000 py There was a significant decrease in the rates of MAA in all the groups of causes analysed, except for circulatory diseases and neurological and mental diseases, although these are causes with very low rates of MAA. Of the three main causes of MAA, the largest relative decrease corresponded

to digestive diseases (-42.0%), followed by external causes (-32.2%) and cancer (-30.8%). In absolute terms the largest decrease also corresponded to digestive diseases (-9.2 MAA/100,000 py, followed by cancer (-6.2/100,000 pa) and external causes (-2.9/100,000 py).

TABLE 58. Evolution in average annual alcohol-attributable mortality rates in the population aged 15 and over, by specific cause. Spain, 2001-2021.

	Average annual rates per 100,000 person-years standardised by age						Change between 2001-04 and 2021	
	2001-04	2005-09	2010-14	2015-19	2020	2021	Absolute difference[1]	Percentage change[2]
Causes of death								
TOTAL	50.4	46.6	36.6	34.7	30.6	32.9	-17.5	-34.7
Cancer	20.1	18.2	16.2	15.2	13.3	13.9	-6.2	-30.8
Circulatory diseases	0.0	1.2	-0.7	0.3	0.6	0.7	0.7	
Infectious diseases	0.9	0.8	0.5	0.6	0.4	0.3	-0.6	-66.7
Metabolic diseases	-1.7	-1.4	-1.6	-1.3	-1.3	-1.3		
Digestive diseases	21.9	19.8	16.1	13.7	11.9	12.7	-9.2	-42.0
Neurological/mental diseases	0.3	0.3	0.3	0.4	0.5	0.6	0.3	100.0
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0		
External causes	9.0	7.9	5.7	5.9	5.3	6.1	-2.9	-32.2

[1]Difference between the rate in 2021 and the rate in 2001-2004 expressed in MAA per 100,000 person-years.

[2][(2021 rate - 2001-2004 rate) / 2001-2004 rate]*100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

The annual average MAA rates standardised by specific cause, sex and period are shown in Table 58. In 2021 the MAA rate was 57.8/100,000 py in men and 12.6/100,000 pa in women. While in men the three causes with the highest MAA rates were, in that order, cancer, digestive diseases and external causes, in women they were cancer, digestive diseases and circulatory diseases, with external causes in fourth place. With regard to the evolution by periods, between 2001-2004 and 2021 there was a significant decrease in the MAA rates for all cause categories with a positive balance, except for neurological and mental illnesses in both men and women. Overall, in relative terms the annual decline in the MAA rate was quite similar in men (-35.1%) and women (-33.7%), although the decline in the MAA rate for cancer was considerably higher in men (-33.0%) than in women (-23.9%) and the same was true for the MAA rate for external causes (-33.7% and -15.8%, respectively). On the other hand, the opposite was true for the rate of MAA due to digestive diseases (-49.0% in women and -40.4% in men).

TABLE 59. Evolution in average annual alcohol-attributable mortality rates in the population aged 15 and over, by sex and specific cause. Spain, 2001-2021.

	Average annual rates per 100,000 person-years standardised by age						Change between 2001-2004 and 2021	
	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021	Absolute difference[1]	Percentage change[2]
Men								
TOTAL	89.1	82.2	62.8	61.0	53.2	57.8	-31.3	-35.1
Cancer	36.4	32.7	28.8	27.0	22.8	24.4	-12	-33.0
Circulatory diseases	-3.1	-0.7	-4.6	-2.0	-0.7	-0.6		
Infectious diseases	1.8	1.5	1.0	1.1	0.7	0.5	-1.3	-72.2
Metabolic diseases	-0.3	-0.3	-0.7	-0.6	-0.6	-0.6		
Digestive diseases	36.6	33.4	27.0	23.6	20.1	21.8	-14.8	-40.4
Neurological/mental diseases	0.5	0.5	0.5	0.7	0.8	0.9	0.4	80.0
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0		
External causes	17.2	15.2	10.8	11.1	10.0	11.4	-5.8	-33.7
Women								
TOTAL	19.0	17.7	14.8	13.4	12.2	12.6	-6.4	-33.7
Cancer	7.1	6.6	6.1	5.7	5.5	5.4	-1.7	-23.9
Circulatory diseases	2.5	3.0	2.3	2.1	1.9	2.0	-0.5	-20.0
Infectious diseases	0.3	0.2	0.2	0.2	0.2	0.1	-0.2	-66.7
Metabolic diseases	-2.4	-2.1	-2.1	-1.7	-1.8	-1.7		
Digestive diseases	9.6	8.2	6.6	5.2	4.7	4.9	-4.7	-49.0
Neurological/mental diseases	0.1	0.1	0.1	0.2	0.2	0.2	0.1	100.0
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0		
External causes	1.9	1.7	1.6	1.6	1.4	1.6	-0.3	-15.8

[1]Difference between the rate in 2021 and the rate in 2001-2004 expressed in MAA per 100,000 person-years.

[2][(2021 rate - 2001-2004 rate) / 2001-2004 rate]*100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

The average annual rates of MAA by specific cause, age group and period are shown in Table 60. In 2021, the highest rates of MAA corresponded to external causes in the age groups 15-34 and 35-44, to digestive diseases in the groups 45-54 and 55-64 and to cancer from 64 onwards, a situation that was repeated in previous periods, except in 2001-2004 where the highest rate in the group 65-74 still corresponded to digestive diseases. Between 2001-2004 and 2021 the average annual rate of MAA decreased in all age groups. The sharpest declines in relative terms occurred in the 35-44 (-64.6%) and 15-34 (-58.5%) age groups, mainly due to declines in the rates of MAA due to external causes and digestive diseases, and the lowest in the 85+ age group (-3.0%). In absolute terms, the largest declines were among 75–84-year-olds (-11.4 MAA/100,000 py), which was mostly due to the decline in the rate of MAA due to digestive diseases (Table 60).

TABLE 60. Evolution in average annual alcohol-attributable mortality rates in the population aged 15 and over, by specific cause and age group. Spain, 2001-2021.

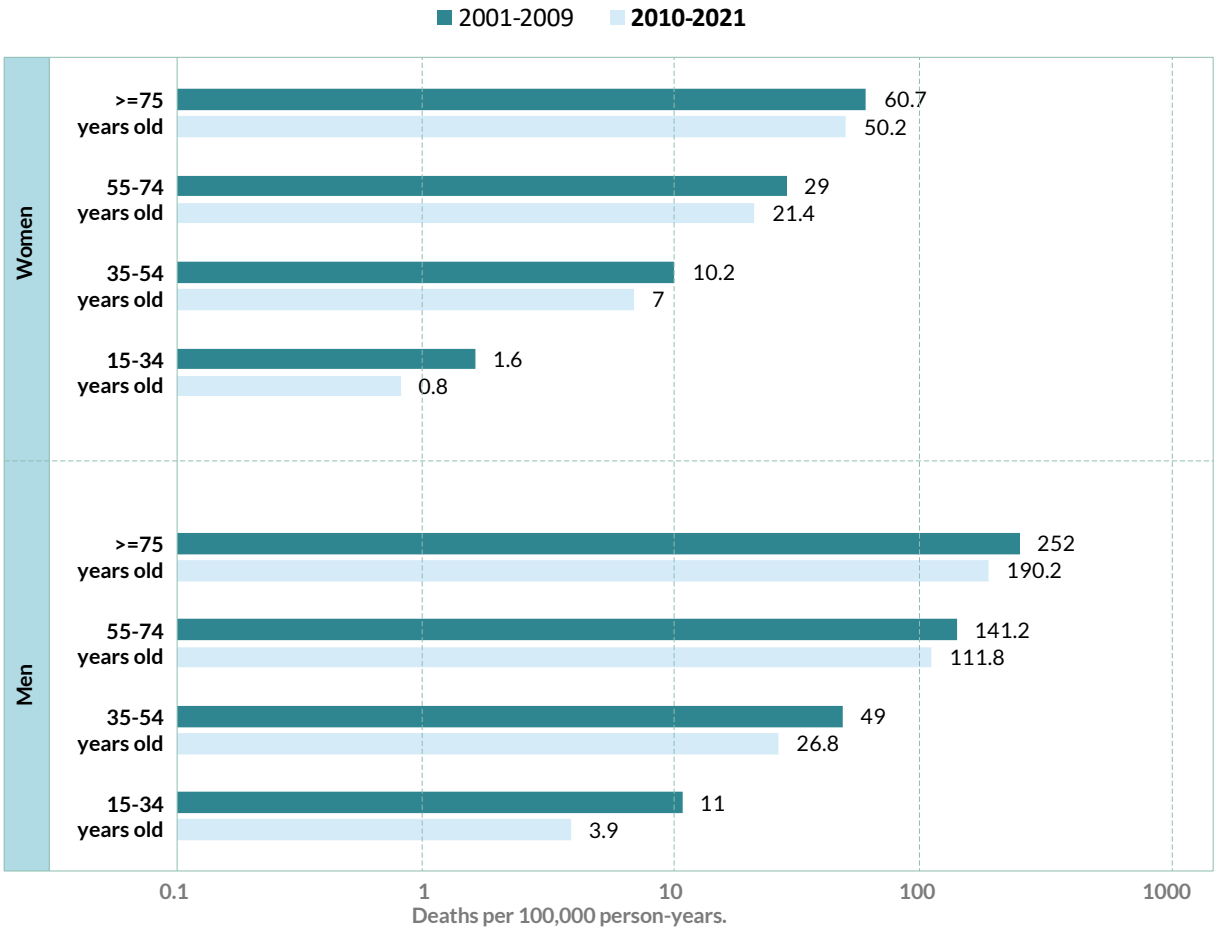
Average annual rates per 100,000 person-years standardised by age							
Age group	15-34 years old	35-44 years old	45-54 years old	55-64 years old	65-74 years old	75-84 years old	>=85 years old
2001-2009							
TOTAL	6.5	4.8	12.1	20.0	27.6	35.3	43.1
Cancer	0.2	0.8	4.1	8.8	12.7	15.4	17.5
Circulatory diseases	0.0	-0.1	-0.1	-0.6	-0.5	1.9	8.0
Infectious diseases	0.0	0.1	0.1	0.2	0.3	0.9	2.1
Metabolic diseases	0.0	0.0	0.0	-0.2	-0.6	-1.7	-6.4
Digestive diseases	0.5	2.1	5.9	9.3	12.9	14.8	13.4
Neurological/mental diseases	0.1	0.0	0.1	0.1	0.1	0.2	0.4
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External causes	5.6	1.9	2.2	2.4	2.7	3.9	8.1
2010-2019							
TOTAL	2.4	1.9	8.2	15.1	22.8	26.0	40.3
Cancer	0.2	0.4	2.6	7.0	11.7	12.7	16.4
Circulatory diseases	0.0	-0.1	-0.3	-0.8	-0.7	0.1	7.7
Infectious diseases	0.0	0.0	0.1	0.1	0.2	0.5	1.8
Metabolic diseases	0.0	0.0	0.0	-0.2	-0.5	-1.5	-6.7
Digestive diseases	0.2	0.7	4.2	7.2	9.6	10.4	10.7
Neurological/mental diseases	0.1	0.0	0.1	0.1	0.2	0.3	0.7
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External causes	1.9	0.9	1.5	1.6	2.3	3.5	9.6
2020							
TOTAL	2.4	1.7	6.1	14.1	21.2	23.9	40.8
Cancer	0.2	0.3	1.8	6.3	10.7	11.5	15.6
Circulatory diseases	0.0	-0.1	-0.2	-0.7	-0.3	0.9	10.7
Infectious diseases	0.0	0.0	0.1	0.1	0.2	0.5	1.7
Metabolic diseases	0.0	0.0	0.0	-0.2	-0.4	-1.3	-6.8
Digestive diseases	0.2	0.5	2.8	6.7	8.4	8.6	9.0
Neurological/mental diseases	0.1	0.0	0.1	0.1	0.3	0.4	0.9
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External causes	2.0	0.9	1.6	1.7	2.3	3.3	9.7
2021							
TOTAL	2.7	1.7	6.1	14.1	21.6	23.9	41.8
Cancer	0.1	0.3	1.7	6.2	10.8	11.6	16.0
Circulatory diseases	0.0	-0.1	-0.2	-0.8	-0.2	1.1	10.9
Infectious diseases	0.0	0.0	0.1	0.1	0.1	0.3	0.8
Metabolic diseases	0.0	0.0	0.0	-0.2	-0.4	-1.2	-6.4
Digestive diseases	0.2	0.5	2.9	6.8	8.9	8.2	9.3
Neurological/mental diseases	0.1	0.0	0.1	0.2	0.3	0.5	1.1
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External causes	2.3	0.9	1.6	1.8	2.2	3.5	10.2
	Percentage change between 2021 and 2001-2004[1]						
TOTAL	-58.5	-64.6	-49.6	-29.5	-21.7	-32.3	-3.0

[1][(2021 rate - 2001-2004 rate) / 2001-2004 rate]*100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

Figure 36 plots the comparison of average annual age-standardised alcohol-attributable mortality rates between the periods 2001-2009 and 2010-2021 by sex and age group on a logarithmic scale. It can be seen that between 2001-2009 and 2010-2021 the relative decline in the MAA rate was more intense in younger age groups, especially in men aged 15-34 years old, while the absolute decline was higher in older people, especially in men aged 85 years old and older.

FIGURE 36. Evolution in the average annual age-standardised alcohol-attributable mortality rate by sex and age group[1]. Spain, 2001-2021.



[1]Average annual age-standardised alcohol-attributable mortality rates per 100,000 person-years. The population figures for residents in Spain on 1st July of each year and the 2013 European Standard Population have been used to calculate them. The rates have been plotted on a logarithmic scale in order to compare the relative decline in the different age and sex subgroups taking into account the initial magnitude of the rates in these subgroups.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

The average annual age-standardised MAA rates and the percentage of MAA corresponding to the different types of alcohol consumption, according to sex and period, are shown in Table 61. In all periods and in both males and females the highest MAA rate was observed in heavy drinkers. In 2021 the MAA rate in heavy drinkers accounted for 79.6% of the total MAA rate in men and 51.6% in women.

Between 2001-2004 and 2021 the MAA rate decreased significantly in heavy drinkers (-38.5% in men and -35.0% in women) and former regular drinkers (-55.3% in men and -62.3% in women), while it increased in light and moderate drinkers (80.0% in men and 2.5% in women). As a consequence of

these changes, the MAA rate in light and moderate drinkers has increased as a percentage of the total MAA rate.

TABLE 61. Evolution in average annual alcohol-attributable mortality rates and percentage of MAAs corresponding to each type of drinker in the population aged 15 years old and over, by sex and type of drinking. Spain, 2001-2021.

	Average annual rates per 100,000 person-years standardised by age						Percentage change between 2001-2004 and 2021
	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021	
Men							
TOTAL	89.0	82.1	62.7	60.9	33.8	57.8	-35.1
Heavy drinkers[1]	74.8	67.6	52.1	49.1	22.6	46.0	-38.5
Light/moderate drinkers[2]	4.0	5.3	5.4	6.8	6.5	7.2	80.0
Ex-regular drinkers[3]	10.3	9.2	5.2	5.0	4.6	4.6	-55.3
Women							
TOTAL	19.3	18.0	14.8	13.4	9.3	12.6	-34.7
Heavy drinkers[1]	10.0	8.9	7.2	6.8	3.3	6.5	-35.0
Light/moderate drinkers[2]	4.0	4.3	5.0	4.3	3.9	4.1	2.5
Ex-regular drinkers[3]	5.3	4.7	2.5	2.2	2.1	2.0	-62.3
Percentage of MAAs corresponding to each type of drinker[4]							
Men							
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	
Heavy drinkers[1]	84.0	82.3	83.1	80.6	66.9	79.6	
Light/moderate drinkers[2]	4.5	6.5	8.6	11.2	19.2	12.5	
Ex-regular drinkers[3]	11.6	11.2	8.3	8.2	13.6	8.0	
Women							
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	
Heavy drinkers[1]	51.8	49.4	48.6	50.7	35.5	51.6	
Light/moderate drinkers[2]	20.7	23.9	33.8	32.1	41.9	32.5	
Ex-regular drinkers[3]	27.5	26.1	16.9	16.4	22.6	15.9	

[1]Heavy drinkers: Persons who have consumed ≥60 g of pure alcohol (men) or ≥40 g of pure alcohol (women) per day in the last year.

[2]Light/moderate drinkers: Persons who have consumed alcoholic beverages in the past year but have consumed <60 g of pure alcohol (men) or <40 g of pure alcohol (women) on a daily basis.

[3]Ex-regular drinkers: People who have not consumed alcoholic beverages in the last year but have consumed alcoholic beverages at least 12 times in their life.

[4] (Rate of each type of drinker/Total rate)*100

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024..

It is interesting to study the relative and absolute inequality of MAA rates between men and women. Table 62 includes the ratio of MAA rates between men and women as an indicator of relative gender inequality and the difference in MAA rates as an indicator of absolute inequality, by period and cause of death, and by period and type of drinker. In terms of relative sex inequality, it is observed

that in 2021 the rate of MAA was 4.6 times higher in men than in women, and that among the three main causes of MAA, the highest relative inequality corresponded to external causes (7.0). By type of drinker, the highest relative inequality was observed for heavy drinkers (7.1), being significantly lower for light and moderate drinkers (1.7) and former regular drinkers (2.3). In terms of absolute gender inequalities, the difference in MAA rates between men and women was 45.2/100,000 py, with the highest difference corresponding to cancer.

Finally, with regard to temporal evolution, it can be observed that the relative sex inequality of the MAA rate (rate ratio) varied little over the period studied, while the absolute inequality decreased from 70.1 MAA/100,000 py in 2001-2004 to 45.2 MAA/100,000 py in 2021.

TABLE 62. Evolution of male-female inequality in average annual alcohol-attributable mortality rates in the population aged 15 years old and over, by specific cause and by type of drinker. Spain, 2001-2021.

	Age-standardised male/female rate ratio						Age-standardised male-female rate differential					
	2001-04	2005-09	2010-14	2015-19	2020	2021	2001-04	2005-09	2010-14	2015-19	2020	2021
TOTAL	4.7	4.6	4.3	4.6	4.4	4.6	70.1	64.5	48.0	47.6	41.0	45.2
Cause of death												
Cancer	5.2	5.0	4.8	4.7	4.1	4.5	29.4	26.1	22.7	21.3	17.2	19.0
Circulatory diseases	-1.2	-0.2	-2.0	-0.9	-0.4	-0.3	-5.7	-3.7	-6.9	-4.1	-2.5	-2.6
Infectious diseases	6.9	6.7	6.3	5.1	4.8	6.4	1.5	1.3	0.8	0.9	0.6	0.4
Metabolic diseases	0.1	0.2	0.3	0.4	0.3	0.4	2.1	1.8	1.4	1.1	1.1	1.0
Digestive diseases	3.8	4.0	4.1	4.5	4.3	4.4	27.1	25.1	20.4	18.4	15.4	16.9
Neurological/mental diseases	4.6	4.4	4.1	3.6	3.6	3.8	0.4	0.4	0.4	0.5	0.6	0.7
External causes	9.1	8.9	6.9	6.8	7.0	7.0	15.4	13.5	9.3	9.5	8.6	9.8
Type of drinker												
Heavy drinkers[1]	7.5	7.5	7.2	7.2	6.9	7.1	64.8	58.6	44.8	42.3	19.4	39.6
Light/moderate drinkers[2]	1.0	1.2	1.1	1.6	1.7	1.7	0.0	0.9	0.5	2.5	2.6	3.0
Ex-regular drinkers[3]	1.9	2.0	2.1	2.2	2.2	2.3	5.0	4.5	2.7	2.7	2.5	2.6

[1]Heavy drinkers: Persons who have consumed ≥60 g of pure alcohol (men) or ≥40 g of pure alcohol (women) per day in the last year.

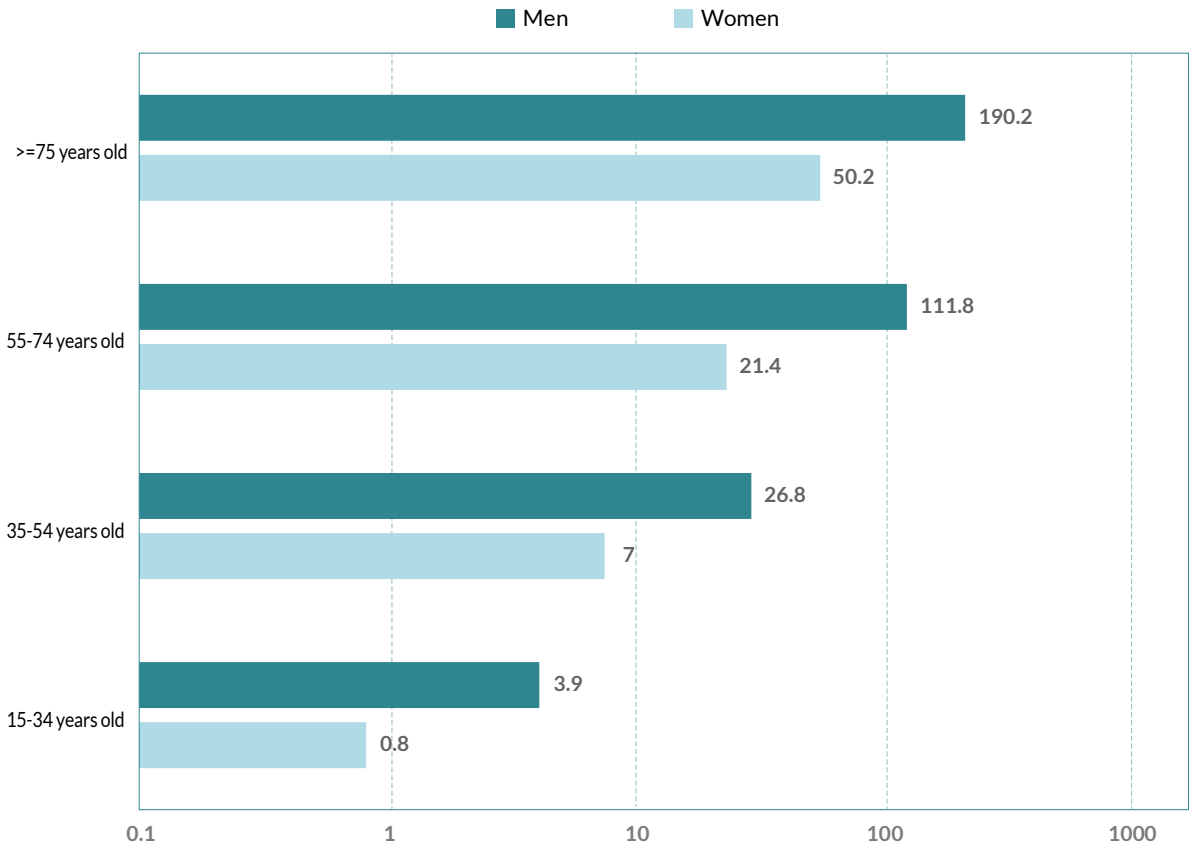
[2]Light/moderate drinkers: Persons who have consumed alcoholic beverages in the past year but have consumed <60 g of pure alcohol (men) or <40 g of pure alcohol (women) on a daily basis.

[3]Ex-regular drinkers: People who have not consumed alcoholic beverages in the last year but have consumed alcoholic beverages at least 12 times in their life.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

Figure 37 plots the age-standardised MAA rates on a logarithmic scale by sex and age group for the period 2010-2021. It can be seen that there is not much variation in the relative sex inequality of the MAA rate by age group, and that, as might be expected, the greatest absolute sex inequality, as measured by the difference in MAA rates, occurs among those aged 75 and over.

FIGURE 37. Average annual age-standardised alcohol-attributable mortality rate[1], by sex and age group. Spain, 2010-2021.



[1]Average annual age-standardised alcohol-attributable mortality rates per 100,000 person-years. The population figures for residents in Spain on 1st July of each year and the 2013 European Standard Population have been used to calculate them. The rates have been plotted on a logarithmic scale to show the relative inequality between men and women.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

8.3.2.3 Contribution of alcohol consumption to overall mortality

The contribution of alcohol consumption to overall mortality was measured as the ratio of the age-standardised MAA rate to the all-cause standardised mortality rate. Table 63 shows the age-standardised percentage of all-cause deaths attributable to alcohol consumption among Spanish residents aged 15 years old and older during the period 2001-2021 by specific cause, sex and period. In 2021, 3.3% (4.5% in men and 1.6% in women) of the overall age-standardised risk of all-cause mortality was attributable to alcohol consumption. In men, the leading causes of MAA contributing to overall mortality were cancer, digestive diseases and external causes, and in women, cancer, digestive diseases and circulatory diseases.

TABLE 63. Evolution in the age-standardised proportion of alcohol-attributable deaths[1] in the population aged 15 years old and over, by sex and specific cause (%). Spain, 2001-2021.

	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021
Total						
TOTAL	4.1	4.1	3.6	3.5	2.8	3.3
Cancer	1.6	1.6	1.6	1.5	1.2	1.4
Circulatory diseases	0.0	0.1	-0.1	0.0	0.1	0.1
Infectious diseases	0.1	0.1	0.0	0.1	0.0	0.0
Metabolic diseases	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1
Digestive diseases	1.8	1.7	1.6	1.4	1.1	1.3
Neurological/mental diseases	0.0	0.0	0.0	0.0	0.0	0.1
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0
External causes	0.7	0.7	0.6	0.6	0.5	0.6
Men						
TOTAL	5.5	5.5	4.8	4.8	3.9	4.5
Cancer	2.3	2.2	2.2	2.1	1.7	1.9
Circulatory diseases	-0.2	0.0	-0.3	-0.2	-0.1	0.0
Infectious diseases	0.1	0.1	0.1	0.1	0.1	0.0
Metabolic diseases	0.0	0.0	-0.1	0.0	0.0	0.0
Digestive diseases	2.3	2.2	2.0	1.9	1.5	1.7
Neurological/mental diseases	0.0	0.0	0.0	0.1	0.1	0.1
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0
External causes	1.1	1.0	0.8	0.9	0.7	0.9
Women						
TOTAL	2.0	2.0	1.8	1.7	1.4	1.6
Cancer	0.7	0.7	0.8	0.7	0.6	0.7
Circulatory diseases	0.3	0.3	0.3	0.3	0.2	0.3
Infectious diseases	0.0	0.0	0.0	0.0	0.0	0.0
Metabolic diseases	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2
Digestive diseases	1.0	0.9	0.8	0.7	0.5	0.6
Neurological/mental diseases	0.0	0.0	0.0	0.0	0.0	0.0
Other diseases	0.0	0.0	0.0	0.0	0.0	0.0
External causes	0.2	0.2	0.2	0.2	0.2	0.2

[1] Obtained as: (Age-standardised alcohol-attributable mortality rate/Age-standardised all-cause mortality rate)*100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

By type of drinker, during 2021, the contribution of alcohol consumption to overall mortality was mainly due to heavy drinkers, which was clearer among men (3.6%, out of an overall 4.5%) than among women (0.8%, out of an overall 1.6%) (Table 64).

TABLE 64. Evolution in the age-standardised proportion of alcohol-attributable deaths[1] in the population aged 15 years old and over, by sex and type of drinker (%). Spain, 2001-2021.

	2001-2004	2005-2009	2010-2014	2015-2019	2020	2021
Men						
TOTAL	5.5	5.5	4.7	4.8	2.5	4.5
Heavy drinkers[2]	4.6	4.6	3.9	3.9	1.7	3.6
Light/moderate drinkers[3]	0.2	0.4	0.4	0.5	0.5	0.6
Ex-regular drinkers[4]	0.6	0.6	0.4	0.4	0.3	0.4
Women						
TOTAL	2.0	2.0	1.8	1.7	1.1	1.6
Heavy drinkers[2]	1.0	1.0	0.9	0.9	0.4	0.8
Light/moderate drinkers[3]	0.4	0.5	0.6	0.6	0.4	0.5
Ex-regular drinkers[4]	0.5	0.5	0.3	0.3	0.2	0.3

[1]Obtained as: (Age-standardised alcohol-attributable mortality rate/Age-standardised all-cause mortality rate)*100.

[2]Heavy drinkers: Persons who have consumed ≥60 g of pure alcohol (men) or ≥40 g of pure alcohol (women) per day in the last year.

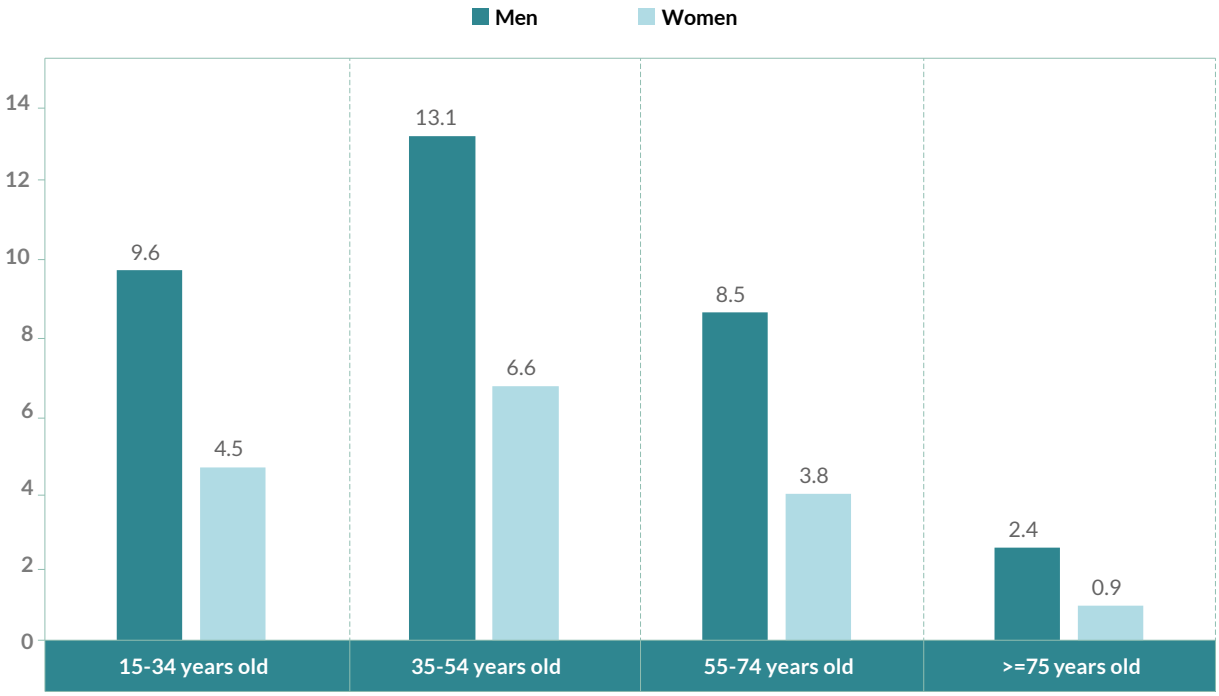
[3]Light/moderate drinkers: Persons who have consumed alcoholic beverages in the past year but have consumed <60 g of pure alcohol (men) or <40 g of pure alcohol (women) on a daily basis.

[4]Ex-regular drinkers: People who have not consumed alcoholic beverages in the last year but have consumed alcoholic beverages at least 12 times in their life.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

By age group, during 2021 the highest contribution of alcohol consumption to overall mortality was observed in the 35-54 age group (9.7%), followed by the 15-34 age group (8.6%), 55-74 (6.5%) and 75 and over (1.6%). During the 2010-2021 period as a whole, the highest contribution was also observed in the 35-54 age group (13.1% in men and 6.6% in women) and the lowest in those aged 75 and over (2.4% in men and 0.9% in women) (Figure 39).

FIGURE 38. Proportion of age-standardised alcohol-attributable deaths, by sex and age (%). Spain, 2010-2021.



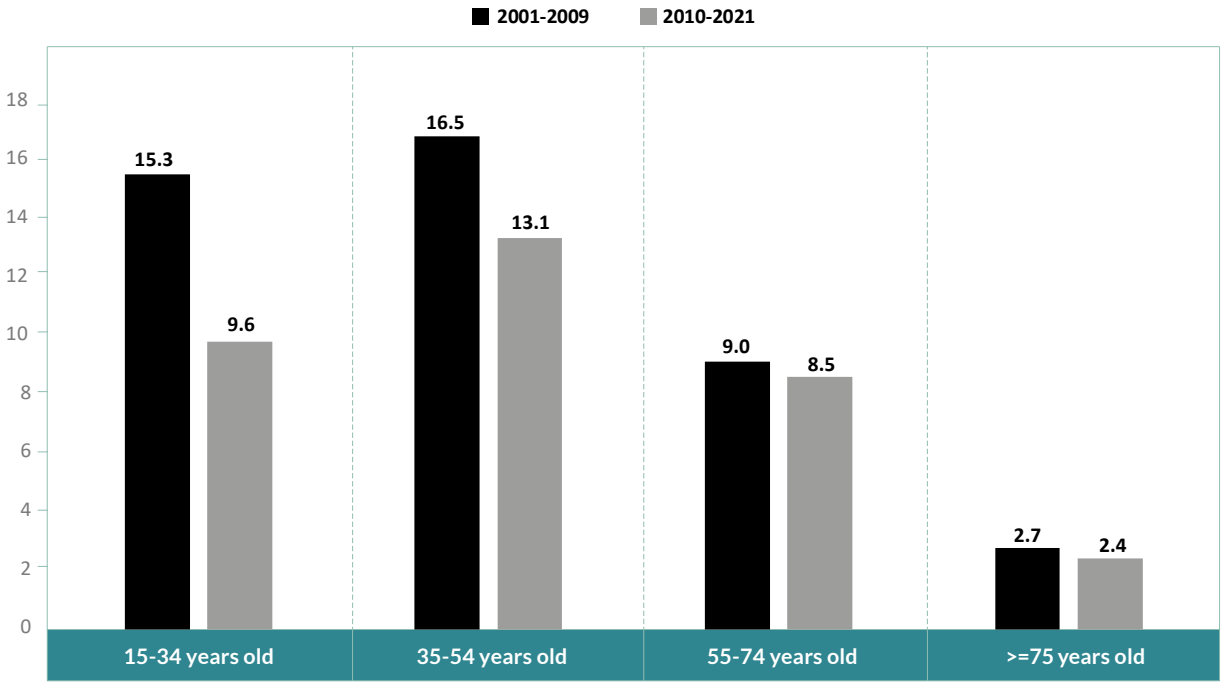
[1]Percentage of age-standardised alcohol-attributable deaths over total age-standardised deaths from any cause. Calculated as: (age-standardised alcohol-attributable death rate / age-standardised all-cause death rate) x 100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

In terms of time evolution, between 2001-2004 and 2021 the contribution of alcohol consumption to overall mortality decreased from 5.5% to 4.5% in men and from 2.0% to 1.6% in women. In men, the contribution of the three main causes of MAA (cancer, digestive diseases and external causes) declined, while in women only the contribution of the first two declined, with the contribution of external causes remaining stable. The contribution of MAA due to digestive diseases decreased the most in both men and women (Table 62). Between 2001-2004 and 2021, the decrease in the contribution of alcohol consumption to overall mortality was due to a decrease in the contribution of heavy drinkers in both men (from 5.5% to 4.5%) and women (from 1.0% to 0.8%), and of ex-drinkers in both men (from 0.6% to 0.4%) and women (from 0.5% to 0.3%). In contrast, the contribution of light and moderate drinkers increased in both men (from 0.2% to 0.6%) and women (from 0.4% to 0.5%) (Table 62).

By age group and sex, between 2001-2009 and 2010-2021 the contribution of alcohol consumption to overall mortality declined in all strata except in women aged 75 years old and over, where it remained stable. In both men and women, the largest decline in the contribution was among those aged 15-34 years old and the smallest among those aged 75 years old and over, in both men and women (Figures 40 and 41).

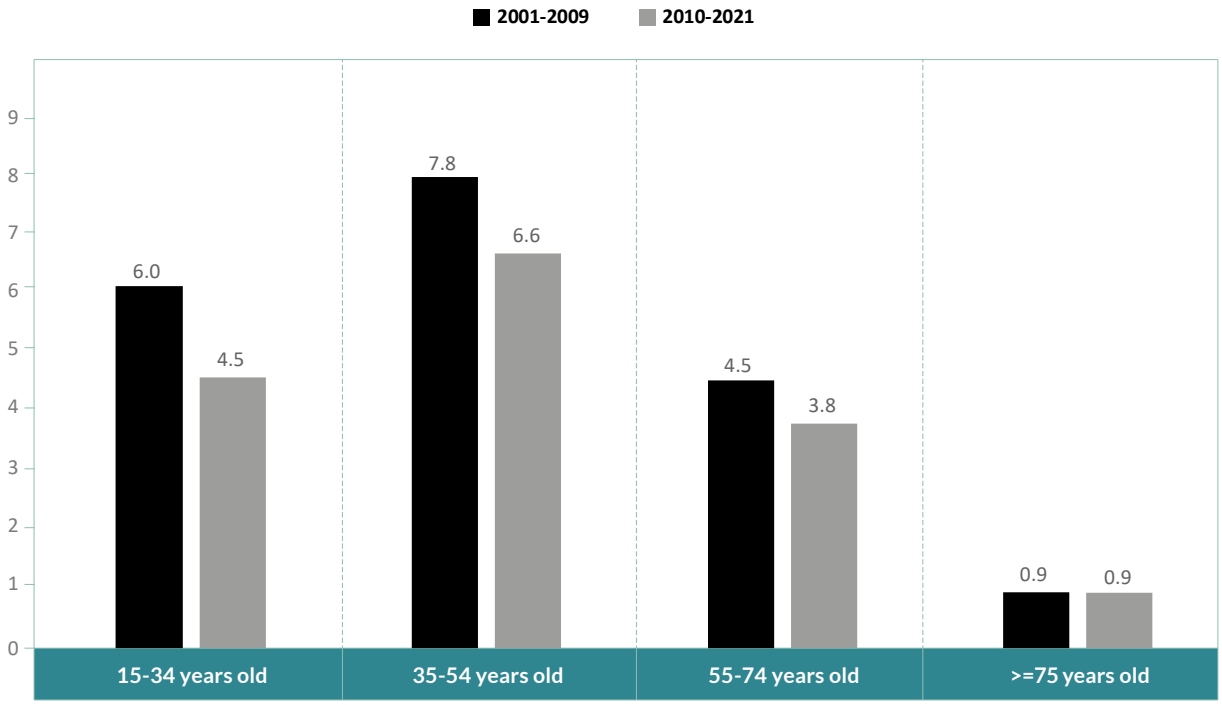
FIGURE 39. Evolution in the age-standardised proportion of alcohol-attributable deaths among men aged 15 and over, by age group (%). Spain, 2001-2009 and 2010-2021.



[1]Percentage of age-standardised alcohol-attributable deaths over total age-standardised deaths from any cause. Calculated as: (age-standardised alcohol-attributable death rate / age-standardised all-cause death rate) x 100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

FIGURE 40. Evolution in the age-standardised proportion of alcohol-attributable deaths than among women aged 15 and over, by age group (%). Spain, 2001-2009 and 2010-2021.



[1]Percentage of age-standardised alcohol-attributable deaths over total age-standardised deaths from any cause. Calculated as: (age-standardised alcohol-attributable death rate / age-standardised all-cause death rate) x 100.

SOURCE: M Donat et al. Mortality Attributable to Alcohol in Spain 2001-2021 DGPNSD, 2024.

8.3.2.4 Alcohol-attributable mortality by Autonomous Regions.

A brief summary of the main results by Autonomous Region is presented:

In the period 2010-2021 the Autonomous Regions with the highest MAA rates per 100,000 py were Asturias (42.1), Galicia (40.0), and Ceuta and Melilla (38.8) and the lowest Madrid (26.5), Extremadura (31.0) and Navarra (31.3). In general, the coastal regions were above the national average and the inland regions below. In the same period, the Autonomous Regions with the highest contributions of alcohol consumption to the overall mortality risk were Asturias (4.2%), Galicia (3.9%) and Andalusia (3.8%) and the lowest in Madrid (2.6%), Navarra (3.1%) and Extremadura (3.1%).

With regard to the evolution over time, between 2001-2009 and 2010-2021, the average annual rate of MAA decreased in all Autonomous Regions in both men and women, except in Ceuta and Melilla among women, with the greatest relative decreases in Madrid (-35.8%), Andalusia (-30.0%) and Basque Country (-29.1%) and the smallest in Valencia (-21.2%), Castile and Leon (-17.0%) and Ceuta and Melilla (-10.0%). The contribution of MAAs to overall mortality also decreased in all Autonomous Regions except Ceuta and Melilla, with the largest absolute decreases in Madrid (-0.9%), Basque Country (-0.8%) and Andalusia (-0.8%), and the smallest decreases in Castile and Leon

(-0.1%), Extremadura (-0.3%) and Valencia. Finally, absolute inter-regional heterogeneity in terms of the age-standardised MAA rate and the contribution of alcohol consumption to overall mortality also decreased.

9 Conclusions

In Spain, alcohol is the most widely consumed psychoactive substance in the general population at all ages. In general terms, its consumption is more frequent among men than among women and decreases with increasing age. Except in young people, where the opposite is true.

In Spain, the average age at which people start drinking alcoholic beverages is around 16 years old, which means that it is a very widespread habit from a very early age. It is worth noting that 3 out of 4 students aged 14-18 admit to having drunk alcohol at some time in their lives; also, some time in the last year; and more than half of them report recent alcohol consumption (in the last month). In this age group, alcohol consumption is somewhat more frequent among girls than among boys, with a gap that has been widening in recent years. And for both sexes, the prevalence of drinking increases with age, from 36.5% among 14-year-old students to 73.8% at the age of 18.

But in addition to the spread of this habit, certain heavy drinking patterns, such as self-reported drunkenness and *binge drinking*, are of concern. These episodes are associated with indulging in *botellón* (gathering in public spaces to drink store bought alcohol), and occur frequently in this age group, both in boys and girls. In the last month, 19.7% of 14–18-year-old students reported indulging in *botellón*, 20.8% reported drunkenness and 28.2% reported *binge drinking*. Episodes of heavy drinking pose an additional risk to health and to other risky behaviours, such as driving or riding in a vehicle under the influence of alcohol, getting into fights or having unprotected sex.

As might be expected, this situation of high prevalence of alcohol consumption among young people goes hand in hand with a low perception by young people of the risk posed by alcohol consumption. Out of 10 students, 6 consider that drinking 5 or 6 beers/drinks of alcoholic beverages on weekends can cause a lot or quite a lot of problems, and that daily alcohol consumption (drinking 1 or 2 beers/drinks every day) is dangerous. This indicates a certain normalisation of the drinking habit and may be both a cause and a consequence of the spread of the drinking habit. Another factor that favours alcohol consumption among young people is the ease with which they can obtain alcoholic beverages: 92.9% of them do not perceive any difficulty in obtaining them, a scenario that has hardly changed in the last two decades.

Over time, the frequency of alcohol consumption among young people of this age has been decreasing since 2012, and this should be a motivation to continue working to reduce consumption in this population group.

On the other hand, prevention policies should even consider consumption at younger ages, since among students aged 12 and 13, in the 1st and 2nd years of ESO, 34.6% recognise having consumed alcohol at some time in their lives, 30.6% recognise consumption in the last year, and 21.5% consumption in the last month. These prevalences are very similar in both sexes and higher at 13 than at 12 years old. Heavy drinking also occurs in these age groups: in the last year, 8.3% of students aged 12 and 13 admit to having indulged in *botellón* and 5.8% to having been drunk. All these data show the normalisation of alcohol consumption and the ease of access to alcoholic beverages long before the age of majority.

Among the general population aged 15-64, alcohol consumption is widespread: 93.2% of them report having consumed alcoholic beverages at some time in their lives, 76.4% at some time in the last

year and 64.5% in the last month. Moreover, 9.0% of 15–64-year-olds acknowledge daily alcohol consumption in the last month, the latter being the only prevalence with a decreasing trend in the EDADES survey time series, which now spans more than two decades. The average age of onset of alcohol consumption in this population group is 16.5 years old in 2022, slightly lower than the age of onset observed throughout the time series.

With regard to socio-demographic factors, in the general population aged 15-64 years old, alcohol consumption is more frequent in men than in women, decreases with age from 25-34 years old onwards, and increases with educational level. It should be noted, however, that daily alcohol consumption is more frequent with increasing age, and in these people the level of education is also lower.

Regarding the type of drink, in general, beer is the most consumed by both men and women, but men consume almost twice as much as women.

As a pattern of particular risk in the general population aged 15-64 years old, in 2022, 16.7% of drunkenness in the last year and 6.4% in the last month were recorded, as well as 15.4% of *binge drinking*. These heavy drinking patterns are more frequent among men and the younger the age. In addition, 1.6% of women reported drinking alcohol while pregnant.

Among the measures to combat alcohol consumption, 7 out of 10 individuals agree with the inclusion of warnings on the packaging of alcoholic beverages about the harm that alcohol consumption can cause to the body.

In addition to the general population, there are certain population groups that, due to their special characteristics, require specific attention in the fight against substance use. For example, the prison population deprived of liberty. Among them, according to the latest edition of the ESDIP survey (2022), alcohol is the psychoactive substance most consumed prior to admission to prison, and the one that shows the greatest reduction after admission. 54.5% of prisoners reported drinking alcohol in the month prior to entering prison, while 2.0% stated that they had consumed alcohol in prison in the last month. Consumption in prison is more widespread among men and among those under 35 years old. Compared with the general population aged 15 to 64, alcohol is the only substance with a lower prevalence of use in the last year among prisoners before entering prison (60.3%) than in the general population (76.4%).

Looking at other sources reporting alcohol consumption in our country, data from the Tax Agency show a general upward trend in the total volume of alcoholic beverage sales since 2015, with 5,764 million litres sold in 2022. Alcohol tax revenue also reaches the highest values in the historical series studied in 2022. The percentage of pure alcohol in each type of beverage has remained fairly stable in those years. Finally, beer is the beverage that accounts for the largest share of total sales volume (70.4% of the total in 2022), and also accounts for the largest amount of pure alcohol per capita, followed by wine and, at a considerable distance, by derived beverages.

In this context of widespread alcohol consumption in the population, the data on consumption defined as risky by different health bodies is of particular concern. According to the AUDIT scale, in 2022, 6.0% of the Spanish population aged 15-64 years old has a risky alcohol consumption, which allows estimating that in 2022 there were approximately 1,900,000 risky alcohol consumers in Spain. If risk drinking is defined in terms of average daily or weekly consumption, 3.9% of the population aged 15-64 years old would have engaged in risk drinking. In general, risky drinking is more frequent in men and among younger people.

The consequences of alcohol consumption include the need for treatment to manage alcohol dependence, alcohol-related hospital emergency care and alcohol-related mortality.

In 2021, alcohol was responsible for 36.2% of admissions to treatment for substance abuse in the drug dependence and addiction care network in our country, with a total of 25,140 admissions. Of these, almost 3 out of 4 were men. Furthermore, alcohol was present, together with other psychoactive substances, in 41.4% of hospital emergency episodes related to substance use, affecting mainly people under 25 years old. This percentage reached 55% when considering emergency cases in which alcohol was detected as the only psychoactive substance. It was also one of the substances most frequently detected in the toxicological analyses of deaths with judicial intervention related to intentional substance use (36.4% of cases), with a slightly higher frequency in men than in women. It is important to note that in deaths due to acute reaction to substances, alcohol is only recorded when it appears together with some other substance.

Estimates of alcohol-attributable mortality in Spain have recently been updated, including data up to the year 2021. It is estimated that in 2021 there were 13,887 alcohol-attributable deaths in Spain, the vast majority due to cancer or digestive diseases. They are much more frequent in men than in women, and among them they occur mainly in high-risk drinkers. The population risk in 2021, as measured by the average annual age-standardised MAA rate, was 32.9/100,000 person-years (pa), a significant decrease from the years 2001-2004 (-34.7%). This population risk was significantly higher in men than in women and increased considerably with age from 35-44 years old onwards. Of all deaths from all causes in our country in 2021, 3.3% were attributable to alcohol (4.5% of deaths in men and 1.6% in women), demonstrating that alcohol consumption continues to represent a significant burden of disease and death.

Finally, we highlight in this monograph the usefulness of applying new tools, such as the analysis of wastewater for epidemiological purposes, to increase knowledge of the alcohol consumption situation in our country, as it makes it possible to estimate alcohol consumption in a population and, in serial analyses, to monitor it.

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