

General-Directorate for Intervention in
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Frequent/High Risk Cannabis Use

Summary
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Introduction

Frequent and high risk cannabis use is one of the consumption patterns that integrates the key-indicator **high risk drug use (problem drug use)** from the European Monitoring Centre on Drugs and Drug Addiction.

The purpose of this indicator is to contribute to a higher knowledge on the dimension and characteristics of drug consumption patterns that involve a greater risk of negative consequences to the user.

In this sense, the conceptual definition for high risk drug use is “recurrent drug use that is causing actual harms (negative consequences) to the person (including dependence, but also other health, psychological or social problems) or is placing the person at a high probability/risk of suffering such harms” (EMCDDA, 2012, p. 27).

For possible operational definitions, for the period of last 12 months, the consensus was:

- Use of cannabis daily, or almost daily, in the preceding 12 months (for general population surveys this will be approximated by use of 20 or more days in the 30 days preceding interview (or similar))
- Medical diagnosis according to current DSM or ICD criteria, e.g. cannabis harmful use or dependence or cannabis use disorder diagnosed in the past 12 months.

At european level, as at national level, the estimation of the dimension of this more intensive consumption, as well as its characterization, have as a main guideline the adaptation of policies and interventions to the needs of the individuals, namely in respect to the prevention of the development of more intensive consumption patterns, reduction of risks related to consumption, dependence treatment and harm minimization.

The aim of this document is to set an updated scenario on the dimension of this phenomenon, at a national level, based on the data available from surveys in different populations and indirect data from the Sources of the National Information System on Psychoactive Substances, Addictive Behaviours and Dependencies.

Cannabis use Portugal

Cannabis has been, consistently, the illicit substance more used in Portugal, independently of factors like age range, sex and place of residence, at a large distance from the other illicit substances.

Generally speaking, the prevalence of cannabis use is close to the prevalence of *any illicit substance*. In both cases, the prevalence of recent use (last 12 months) is lower than the european average.

According to the data of the most recent national survey, representative of the Portuguese population (15-74 years old), on psychoactive substance use (2016/2017), the cannabis prevalence's for the 15-74 years old population are:

15-74 years		
Time period	Cannabis (%)	Any il. substance (%)
Ever in life	9,7	10,4
Last 12 months	4,5	4,8
Last 30 days	3,8	3,9

Source: Balsa, Vital & Urbano (2017)

Considering the results of previous surveys (2001, 2007, 2012), these prevalence's (in the population of 15-64 years old) have been increasing.

At European level, the evolutions are different (increase, decrease) from country to country (OEDT, 2016).

Like what happens with *any illicit substance* use, cannabis use is higher in men, although, in the last survey, the increase in prevalence has been higher in woman.

Analyzing prevalence in relation with age range, cannabis use is higher in the younger populations (15-34 years old):

Time period	15-34 years (%)
Ever in life	15,1
Last 12 months	8,0
Last 30 days	6,4

Source: Balsa, Vital & Urbano (2017)

In the last *European School Survey Project on Alcohol and Drugs* (2015), representative of the 16 years old that go to school, in the continent, the prevalence of cannabis use is also lower than the european average (The ESPAD Group, 2016).

In the most recent survey on psychoactive substance use, representative of school population, from the continent, and, particularly for the ages 13, 14, 15, 16, 17 and 18 years (2015), the prevalence's of this substance use are:

Age	Ever in life (%)	Last 12 months (%)	Last 30 days (%)
13 years	1,8	1,2	0,7
14 years	4,3	3,4	1,8
15 years	8,9	7,0	3,8
16 years	16,7	13,6	7,8
17 years	25,8	20,4	11,0
18 years	34,1	26,8	14,1

Source: Feijão (2016)

In 2015 started the annual implementation of an 18 years old census of participants in the National Defense Day, focused in some indicators of addictive behaviours. Although centered in the 18 years old, it is a survey that gets a more diverse population on social matters, namely because it includes young people that already don't go to school. The prevalence's of use are close to those found in the school setting:

18 years		
Time period	2015 (%)	2016 (%)
Ever in life	29,3	31,6
Last 12 months	22,6	23,8
Last 30 days	14,6	15,2

Source: Carapinha & Calado (2016); Calado e Carapinha (2017)

On the other hand, considering the data from the last national surveys implemented in justice settings (Prisons/2014 and Custodial Facilities for young offenders/2015) cannabis use in these specific populations appears to be higher, even when adjustments are made on sex and age range. For instance, 69% of inmates (16 years or more) reported having already used cannabis in life (Torres *et al.*, 2015), like 87% of young offenders in custody (Carapinha, Guerreiro, Ribeiro & Santos, 2016).

Considering frequency of use, in the survey applied in 2016/2017 to the general population (15-74 years old) when asked about frequency of use in the last 12 months, the majority of cannabis users reported using at least once a week.

In the survey applied in the school setting, the majority of students that used cannabis in the previous 12 months reported using it in 1 to 5 occasions in this period, for any age (13 to 18 years old), although, there is an increase in frequency related with age.

Between the 18 years old inquired in the National Defense Day, cannabis users in the 12 months before, the majority used it in more that 5 occasions.

On the other hand, both the inmates (Torres *et al.*, 2015) and the young offenders (Carapinha *et al.*, 2016) reported a higher frequency of use in the 30 days before imprisonment/custody.

Having in consideration the data available from the Criminal Police on drug seizures, the type of cannabis product more used in Portugal is resin (SICAD, 2016).

Prevalence of frequent/high risk use

According to the National Survey on Psychoactive Substances Use in the General Population, both the operational definitions are presented. Considering the data to the **15-74 years old population** surveyed in 2016/2017:

2,8% used cannabis 4 or more times a week in the last 12 months (2,4% - 3,2%)

Nr = 218 612 (187 381 – 249 842)*

2,6% used cannabis daily or almost daily in the last 30 days (2,3% - 2,9%)

Nr = 202 997 (179 574 – 226 419)*

0,7% have a moderate/high risk consumption (0,5% - 0,9%)

Nr = 54 653 (39 038 – 70 268)*

Source: Balsa, Vital & Urbano (2017)

Considering the criteria **frequency of use**, bearing on the question of 12 month frequency of use (every day/4 to 6 times a week/2 to 3 times a week/2 to 4 times a month/once a month/more rarely), or on the question on 30 days frequency of use (daily or almost daily/several times a week/at least once a week/less

* Figure calculated with reference to the estimations of the 15-74 years old population resident in Portugal in 2016 (National Institute of Statistics).

than once a week), the estimations on the percentage of Portuguese that present this more frequent consumption, vary between 2,2% and 3,1%.

Although the cannabis prevalence in Portugal is lower than the European average, the prevalence of this more frequent pattern of use seems to be higher. According to the European Report on Drugs (2016), it is estimated in 1% the percentage of Europeans with daily/almost daily use in the last 30 days (OEDT, 2016).

On the other hand, for the definition case based on **risk/dependency assessment**, this percentage is 0,6%. This assessment is based on the application of CAST – *Cannabis Abuse Screening Test*, instrument that allows to assess the level of risk attributed to the consumption pattern of the person.

Based on the answers of respondents in 6 questions where they have to select in which measure each one is applied to his own case (1-never/2-rarely/3-from time to time/4-sometimes/5-many times) a score is attributed, being a *moderate risk level* for a score of 3 and a *high risk level* for a score of 4 to 6. The figure of 0,6% refers to 0,2% of moderate risk and 0,4% of high risk.

Considering this discrepancy, it is important to note that, as the first criteria is strictly based on frequency of use, the second one is based on an identification of problems related with use. In this way, considering the conceptual definition of problem/high risk use, it can be stated that with the criteria of frequency of use, it is obtained a broader spectrum of cannabis users, with a more intensive consumption and, in risk of suffering real harms, or even with some real harms already present. On the other hand, with the criteria of assessment of risk/dependency, it is obtained an estimation of a more restrict population, in which real harms are identified.

These prevalence's refer to a percentage of individuals that, in the general population (15-74 years old) use cannabis with this pattern. On the other hand, it is relevant to identify in which measure this more intensive consumption is more or less common in the population of cannabis users.

In the context of last 12 months cannabis users, 64% reported this more intensive frequency of use. In the same way, 69% of last 30 days cannabis users reported using it daily or almost daily. In turn, 14% are classified

with moderate/high risk consumption: 5,7% with moderate risk and 8,6% with high risk.

15-74 years		
Case-definition	Participants (%)	Cannabis users (%)
4 or more times a week in the last 12 months	2,8	64,2 (CONS 12M)
Daily or almost daily use in the last 30 days	2,6	69,2 (CONS 30D)
Moderate/high risk use	0,7	14,3 (CONS 12M)
Moderate	0,3	5,7
High	0,4	8,6

Source: Balsa, Vital & Urbano (2017)

In the same survey, the prevalence of moderate/high risk use between young people (15-34 years old) doubles the one from the general population: 1,2%.

Based on the last survey on addictive behaviours in school settings, the percentage of students that reported using cannabis in 20 or more occasions in the previous 30 days varied between 0,1% (13 years) and 2,2% (18 years). On the other hand, for the participants of the National Defense Day/2015 this percentage was 4,4%, being 4,7% in 2016.

Concluding, the information available for **young people** and young adults frequent/high risk cannabis use is:

1,2% from young people with 15-34 years have a moderate/high risk consumption (2016/2017)

Between 0,1% (13 years) and 2,2% (18 years) of the students in continental Portugal used cannabis in 20 or more occasions in the last 30 days (2015)

4,7% of 18 years old used cannabis in 20 or more occasions in the last 30 days (2016)

Source: Balsa, Vital & Urbano (2017); Feijão (2016); Calado and Carapinha (2017)

In the age range of young adults (15-34 years) the proportion of cannabis users with moderate/high risk consumption is the same than in the general population (15-74 years). Considering specifically young people with 18 years old (National Defense Day), the proportion of users with a more frequent pattern of consumption is one third.

15-34 years		
Case-definition	Participants (%)	Cannabis users (%)
Moderate/high risk consumption	1,2	14,7 (CONS 12M)
18 years		
20 or more occasions in the last 30 days	4,7	31 (CONS 30D)

Source: Balsa, Vital & Urbano (2017); Feijão (2016); Calado e Carapinha (2017)

Finally, considering the data from the last national surveys in **justice settings** (Prisons/2014 and Custodial Facilities/2015) the percentage of participants with this pattern of consumption is quite higher (46% of young offenders in custodial facilities reported having used cannabis in 20 or more days in the month before custody, being 22% the percentage for inmates before current imprisonment).

46% of young offenders (14-20 years) in custody in Custodial facilities used cannabis in 20 or more days in the month before custody (2015)

22% of inmates (16 years or more) used cannabis in 20 or more days in the month before current imprisonment (2014)

Source: Carapinha *et al.* (2016); Torres *et al.* (2015)

In the several populations studied, frequent/high risk cannabis use is more common in men than in woman:

Population	Men (%)	Woman (%)
15-74 years (2016/2017)*	1,0	0,3
15-34 years (2016/2017)*	1,8	0,6
13 years students (2015)**	0	0,1
18 years students (2015)**	3,5	1,2
18 years (2016)**	7,1	2,1
Young offenders in custody (14-20 years) (2015)**	49,6	20,0

* moderate/high risk consumption **frequent use

Source: Balsa, Vital & Urbano (2017); Feijão (2016); Calado a& Carapinha (2017); Carapinha *et al.* (2016)

This relation between frequent/high risk cannabis use and the variables of sex and age range is also verifiable in the European context (OEDT, 2016; Thanki *et al.*, 2012).

High risk users in treatment

In 2016, 2 231 patients were in treatment¹ in the public network specialized in dependence treatment – outpatient system – for problems related with drug use, which identified cannabis as the *main substance* of use (that is, the substance that, in the point of view of the patient, causes more problems to him). From this 2 231 patients, 925 are *new patients* (first requests of treatment) and 141 are *readmitted patients* (that is, that didn't use the services for more than 12 months and are now returning).

These patients represent 10,3% from the universe of patients in outpatient treatment. It is important to notice that are, already, half (54,0%) from the new patients, being 13,8% from the readmitted.

2 231 persons in treatment in the public outpatient system due to cannabis use, which correspond to half of new requests of treatment.

As stated before, 54 653 persons between 15-74 years have a moderate/high risk consumption. Facing this figure, even considering that it refers to Portugal (continent and autonomous regions), and that the outpatient system here mentioned refers only to the continent, it appears that the proportion of high risk cannabis users in treatment in these services is low.

¹ That is, with, at least 1 appointment in the year.

Trends

Between 2007 and 2012 (for the population 15-64 years old), the percentage of frequent cannabis users decreased. However, between 2012 and 2016/17 the percentage of the Portuguese resident population (15-74 years old) with this pattern of consumption quadrupled.

This evolution (2012-2016/17) is not explained by a general increase in cannabis prevalence in this time period, as even in the specific group of cannabis users the proportion of frequent use also increased.

Between 2007 and 2012 the percentage of individuals with moderate/high risk consumption (according to CAST) decreased in one decimal point, essentially due to the decrease in high risk consumption. On the other hand, between 2012 and 2016/17, this percentage kept being the same, although with an increase in the proportion of individuals with high risk use.

Although the percentage of high risk use has increased in the general population, this is not a pattern with an increased dimension among cannabis users.

15-74 years		
Case-definition	2012 (%)	2016/17 (%)
4 or more times a week in the last 12 months	0,6 (27% CONS 12M)	2,8 (64,2% CONS 12M)
Daily or almost daily use in the last 30 days	0,6 (46% CONS 30D)	2,6 (69,2% CONS 30D)
Moderate/high risk use	0,6 (28% CONS 12M)	0,7 (14,3% CONS 12M)
Moderate	0,3 (15,0% CONS)	0,3 (5,7% CONS)
High	0,3 (13,0% CONS)	0,4 (8,6% CONS)

Source: Balsa, Vital & Urbano (2014, 2017); Carapinha, Balsa, Vital & Urbano (2014)

15-64 years		
Case-definition	2007 (%)	2012 (%)
4 or more times a week in the last 12 months	1,3 ² (37% CONS 12M)	0,7 (27% CONS 12M)
Daily or almost daily use in the last 30 days	1,6 ⁴ (68% CONS 30D)	0,8 (46% CONS 30D)
Moderate/high risk use	0,8	0,7
Moderate	0,3 (10,1% CONS)	0,4 (15,0% CONS)
High	0,5 (14,9% CONS)	0,3 (13,0% CONS)

Sources: Balsa, Vital & Urbano (2014, 2017); Carapinha, Balsa, Vital & Urbano (2014); SICAD (2016)

Also in the subgroup of young adults, the prevalence of moderate/high risk use keeps being similar between 2012 and 2016/17, but with a decrease in moderate risk consumption and an increase in high risk consumption. Nowadays the moderate risk consumption has a similar prevalence to 2007. On the other hand, although higher than 2012, the high risk consumption keeps being lower than 2007.

Specifically in the subset of cannabis users from this age range it is verifiable that the decrease occurs mainly in moderate risk consumption.

15-34 years		
	Risk Consumption	
	Moderate (%)	High (%)
2007	0,6 (10,2% CONS)	0,9 (14,9% CONS)
2012	0,9 (20,2% CONS)	0,4 (8,4% CONS)
2016/17	0,6 (7,4% CONS)	0,6 (7,3% CONS)

Source: Balsa, Vital & Urbano (2017); SICAD (2016)

The increase in the percentage of frequent/high risk users between 2012 and 2016/17 is followed by an increase in the number of patients in treatment in the outpatient public network, with cannabis has the main substance.

² Percentages upon participants calculated with reference to the percentages upon users, last 12 months cannabis prevalence and sample dimension.

Patients in treatment - public network (outpatient) (Nr)

Main drug - Cannabis

	In treatment/ year	New	Readmitted
2013	1 463	673	131
2014	1 654	689	123
2015	1 923	806	128
2016	2 231	925	141

Source: SICAD (2016); SICAD (2017)

In regard to this analysis, it is, however, important to note that, in the same period, there was an increase in the number of administrative offenses related with cannabis possession for personal use. In the Commissions for the Dissuasion of Drug Addiction, an assessment of the consumption level of risk is done and, for higher levels of risk, individuals are referenced to the treatment system. As such, it is possible, that the increase in patients in treatment is also connected with this evolution.

A second aspect important to notice in this analysis of the increase in high risk consumption and treatment demand, is the fluctuations in the potency of the cannabis products present in the market. Between 2010 and 2014 this potency, in average, increased, having decreased between 2014 and 2015 (SICAD, 2016).

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