National Monitoring
Centre for Drugs
and Addiction

Summary Report
on Addictions
in the Czech Republic

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National Monitoring Centre for Drugs and Addiction

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OFFICE OF THE GOVERNMENT OF THE CZECH REPUBLIC

Summary Report on Addictions in the Czech Republic 2021

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- Report on Alcohol in the Czech Republic 2021:

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- Report on Gambling in the Czech Republic 2021:

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Summary

Current situation and main trends in the field of addictive behaviour in the Czech Republic

Use of tobacco, nicotine and related products and its impact

In the Czech Republic, approximately 20% of the population aged 15 and over smoke daily, i.e. approximately 2 million people. The proportion of smokers in the adult population declined slightly until 2015, but has not changed substantially in recent years. The proportion of adolescent smokers has been declining over the long term. In 2019, ESPAD survey reported that 10% of 16-year-old students smoked daily, which is three times less than in the late 1990's.

Each year, 16-18 thousand people die as a result of smoking, most often due to cancers of the trachea, bronchi and lungs, or chronic obstructive pulmonary disease. For every deceased smoker, 15 years of life are estimated to be lost.

Approximately 1-2 thousand people per year are in contact with services and in treatment for tobacco addiction. Smoking cessation counselling is provided by outpatient doctors of various specializations, pharmacies and addictology programmes, and a significant proportion of smokers attempt to quit without professional help.

In recent years, alternative products, especially electronic cigarettes (or vaporizers) and heated tobacco products, have been growing in popularity, especially among young adults. E-cigarettes are currently used by approximately 5% and heated tobacco products by 3% of adults. These products, which are used for vaping rather than smoking, are less risky from the health perspective than cigarettes, cigars and pipes.

Alcohol use and its impact

Alcohol consumption in the Czech population has long been at a high level. Alcohol consumption in the Czech Republic is equivalent to 10 litres of pure alcohol per capita. Approximately 10% of the adult population drink alcohol daily and the proportion of daily drinkers has been increasing in the long term. Frequent heavy episodic drinking is reported by 12% of the population. While frequent heavy drinking is highest among young adults and decreases with age, daily alcohol consumption increases with age. There has been a significant decline in alcohol consumption among adolescents since 2011, including regular consumption and risky forms of drinking.

An estimated 1.5-1.7 million adults are classified as high-risk alcohol users, with 800-900 thousand people falling into the category of harmful drinking. The proportion of people showing signs of risky and harmful drinking has been increasing over the long term.

Each year, 6-7 thousand people die from alcohol use, of which 2 thousand deaths are directly attributable to alcohol (e.g. deaths from alcoholic liver disease or alcohol intoxication). Another 600 cases a year are indirect deaths, i.e. deaths due to alcohol-related accidents or suicides. Injuries, traffic accidents and alcohol-related violence are also a burden on society and the health system. On average, alcohol addicts die 24 years earlier than the general population.

Approximately 30-35 thousand people are in contact with services and in treatment for alcohol addiction each year, of whom the largest proportion (approximately 27 thousand people) are in contact with psychiatric facilities (20-23 thousand in outpatient care, approximately 6 thousand in inpatient care).

Problematic use of psychoactive medicines

An estimated 14-15% of the population, corresponding to 1.25-1.45 million people, fall into the category of the problematic use of psychoactive medicines, defined on the basis of use of medicines for more than 6 weeks, subjective perception of overuse and/or obtaining medicines without a prescription. Sedatives and hypnotics are used problematically by an estimated 1.1 million people and opioid analgesics by 550 thousand people. Women are more likely to be concerned. Long-term trends in this field are not available.

Misused psychoactive medicines are mainly obtained from the official health system, as well as through family or the internet, but also appear on the illicit drug market.

In the long term, the quantities of benzodiazepines and barbiturates distributed to pharmacies are decreasing (calculated per million daily doses of drugs), while the quantities of Z-drugs, pregabalin and opioid analgesics distributed are increasing.

Approximately 40 people die each year from an overdose of psychoactive medicines, most commonly benzodiazepines. The category of opioids also includes overdoses of opioid analgesics (fentanyl, codeine, dihydrocodeine, hydromorphone, oxycodone). A further 70 cases of deaths under the influence of psychoactive medicines are reported annually due to illness, accident or suicide. Between 150 and 200 people a year are admitted to hospitals for accidents under the influence of psychoactive medicines.

Approximately 3-4 thousand people a year are in treatment for psychoactive medicine use, most of them in outpatient treatment, including 2.5 thousand for problems related to sedatives and hypnotics. Long-term users of psychoactive medicines account for 6% of the total number of patients in outpatient addiction treatment.

Use of illicit drugs

Cannabis is the most commonly used illicit drug in the Czech Republic, with approximately a quarter to a third of adults reporting experience with it. Approximately 8-10% of adults report current cannabis use (i.e. use in the last 12 months), corresponding to approximately 800-900 thousand people. The prevalence of cannabis substance use is higher among men and in younger age groups.

The proportion of adults using cannabis has been stable over the long term, but the proportion of cannabis users among young adults (up to the age of 34) has slightly increased. In contrast, in the adolescent population, experience with cannabis has been declining since 2007. In the last year, 5-10% of the adult population, i.e. an estimated 400-900 thousand people, used cannabis for self-medication. Estimated 200 thousand people used cannabis exclusively for self-medication (i.e. after exclusion of those who also used cannabis for recreational purposes).

Approximately 400 thousand people are at risk of intensive cannabis use, of whom half (200 thousand) are at high risk. There are an estimated 30 thousand daily users of cannabis.

Other illicit drugs are much less commonly used. About 5-7% of adults report use of ecstasy in their lifetime, 4-6% report having used hallucinogens and 2-4% methamphetamine and cocaine.

An estimated 44 thousand people are high-risk drug users, mostly users of methamphetamine (33 thousand) or opioids (11 thousand). In the last ten years, the number of high-risk drug users has increased by about a quarter. An estimated 42 thousand people use drugs by injection.

The prevalence of HIV/AIDS in the Czech population and among people who inject drugs has been low. The prevalence of HCV has been stable over the long term, however it is the most prevalent infection among drug users and represents a burden on the health system.

Between 40 and 60 people die each year from an overdose on illicit drugs, and a further 150 cases of deaths associated with illicit drugs are reported annually due to illness, accident or suicide. Drug-related injuries and traffic accidents also represent a burden on society and the health system.

An estimated 14 thousand people are treated in relation to illicit drug use annually in psychiatric outpatient clinics and approximately 5 thousand in inpatient facilities. Nearly 40 thousand drug users are in contact with low-threshold programmes annually, and in the long term there is a noticeable increase in the number of methamphetamine users, as well as opioid users in recent years. The average age of drug users in contact with addiction services is increasing, reaching 35 years among those in contact with low-threshold programmes.

Gambling and its impact

Gambling in the last 12 months has been reported by 35-50% of adults, with lotteries being the most preferred game, which have long not been considered gambling. After exclusion of lotteries, gambling is reported by 8-19% of the adult population.

In the long term, there has been a slight increase in the prevalence of gambling in the adult population, both for lotteries and for other games (technical games, live games and betting). Gambling is significantly higher among young adults aged 15-34, with the prevalence among males being several times higher than among females.

In the long term, an estimated 150-250 thousand people have been identified at risk of developing gambling-related problems, with 80-100 thousand people falling into the high-risk category. The highest share of people at risk is among players of technical games and online betting. The estimated number of people at risk of problem gambling has been stable over the long term, but the number of people at high risk has slightly increased.

Problem gambling leads to financial, family and work-related problems. The health consequences of problem gambling include a high incidence of psychiatric comorbidity; compared to the general population, people at risk of problem gambling have significantly poorer mental health and are more likely to attempt a suicide.

Approximately 2-3 thousand people per year are in contact with gambling-related services, of which around 1 thousand are in psychiatric care facilities. This is especially true for men, who are treated 5 times more than women. The average age of players in treatment is around 35 years. Most of those in treatment report problems related to technical games (slot machines), but their proportion is decreasing. A significantly increasing proportion of people in treatment report problems related to online betting.

Overview of the situation in the Czech Republic in figures

Prevalence of addictive behaviour in the adult population

- **17-23%** of the population aged 15+ years, i.e. **1.5-2.1 million** people, smoke cigarettes daily or almost daily
- **10%** of people aged 15+ years, i.e. **800-980 thousand** people, drink alcohol daily or almost daily
- **17-19%** of the population, i.e. **1.5-1.7 million** people, are classified as high-risk alcohol consumers, of which **9-10% (800-900 thousand** people) fall into the category of harmful drinking
- **14-15%** of adults, an estimated **1.25-1.45 million** people, fall into the category of the problematic use of psychoactive medicines

- **8-10%** of people aged 15+, an estimated **800-900 thousand** adults, used cannabis in the last 12 months, approximately **207 thousand** adults are at high risk of developing problems related to cannabis use
- **5-10%** of the adult population used cannabis for self-treatment in the last 12 months, i.e. an estimated **400-900 thousand** people
- **1%** of adults have used ecstasy in the last 12 months, **1.5%** hallucinogenic mushrooms, less than **1%** methamphetamines (or amphetamines) and cocaine
- **44.2 thousand** people are high-risk users of methamphetamine or opioids, including **33.1 thousand** methamphetamine users, **6.4 thousand** buprenorphine users, **3.3 thousand** heroin users and **1.4 thousand** users of other opioids
- **2-3%** of the population aged 15+ years fall into the category of problem gambling (i.e. approximately **170-220 thousand** people), of whom **90-120 thousand** fall into the category of high risk

Table 0-1: Prevalence of addictive behaviour in the population of the Czech Republic aged 15+ years

Addictive behaviour among adults	Mean estimate
Daily smokers	1.5-2.1 million
Daily alcohol consumers	800-980 thousand
Risky alcohol drinking	1.5-1.7 million
› harmful drinking	800-980 thousand
Problematic use of psychoactive medicines	1.25-1.45 million
Intensive cannabis users	350-465 thousand
› at high risk	160-250 thousand
People who use drugs (methamphetamine and/or opioids)	43-46 thousand
› methamphetamine users	33-34 thousand
› opioid users	11-12 thousand
People who inject drugs	40-42 thousand
People at risk of problem gambling	170-220 thousand
› at high risk	91-120 thousand

Prevalence of addictive behaviour among children and adolescents

- **10-11%** of 13- to 16-year-old school students report regular or daily tobacco smoking
- **17%** of 11-year-olds, **43%** of 13-year-olds, **76%** of 15-year-olds and **95%** of 16-year-olds have drunk alcohol in their lifetime, with around half reporting drinking alcohol in the last 30 days
- **39%** of 16-year-olds report binge drinking (i.e. drinking 5 or more glasses of alcohol on one occasion) in the last 30 days, **12%** once a week or more often
- **24%** of 16-year-olds have used illicit drug in the last 12 months, **23%** having used cannabis, **3.5%** sedatives without prescription, **3.3%** volatile substances, **2.6%** ecstasy, **1.1%** hallucinogenic mushrooms, **1.9%** LSD or other hallucinogens, and about **1%** cocaine or methamphetamine
- **9-11%** of adolescents have gambled for money in the last 12 months

Impacts of substance use

- **16-18 thousand** deaths a year are caused by tobacco smoking
- **6-7 thousand** deaths a year are caused by alcohol drinking, with alcohol being the main or only cause of death in **2 thousand** cases, of which alcohol intoxication accounts for **400-500** cases per year
- **96** people died in 2020 as a result of fatal overdoses, of which **58** were overdoses of illicit drugs or volatile substances, and **38** related to psychoactive medicines
- **150** fatal cases were identified as being influenced by illicit drugs and psychoactive medicines, for causes other than overdose, most of them due to illness, accidents and suicide

- **14** new HIV diagnoses in 2020 were likely to be related to injecting drug use, another **5** people had a history of injecting drug use
- **800-1000** cases of viral hepatitis C are reported annually, including **400-500** cases among people who inject drugs
- **14-15 thousand** hospital admissions are reported annually for injury under the influence of addictive substances, including **13.5-14 thousand** cases under the influence of alcohol, **250** persons are hospitalised annually for injury under the influence of illicit drugs, **150-200** persons under the influence of psychoactive medicines and **10-15** persons under the influence of volatile substances
- **4.5 thousand** traffic accidents per year are caused by alcohol, **260** by other drugs

Table 0-2: Deaths caused annually by substance use in the Czech population

Addictive behaviour	Deaths associated with use	
	Total	Direct (overdose)
Smoking	16-18 thousand	
Alcohol consumption	6-7 thousand	200-250
Use of psychoactive medicines	110-120	40-50
Use of illicit drugs	100-150	40-60

Network of services for clients with addictions

- **250-300** facilities provide specialised addiction services, including **55-60** low-threshold centres, **50** outreach programmes, **90-100** outpatient treatment programmes (including **10** programmes for children and adolescents), **10-15** detoxification units, **25-30** inpatient healthcare units, **15-20** therapeutic communities, **35-45** outpatient aftercare programmes (of which **20-25** with sheltered housing) and **5-7** homes with special regime for substance users; **60** facilities report patients in opioid substitution treatment and an estimated **600-700** general practitioners provide opioid substitution treatment

Table 0-3: Estimated number of people per year in contact with addiction services and treatment in the Czech Republic

Addictive behaviour	Estimated number of people in contact with services
Smoking	1-2 thousand
Alcohol consumption	30-35 thousand
Use of psychoactive medicines	3-4 thousand
Use of illicit drugs	40-45 thousand
Gambling	2-3 thousand

Financing, market, crime

- **CZK 2,297.5 million (€ 86.9 million)** were spent on addiction policy, of which **52%** was spent on law enforcement, **16%** on harm reduction, **12%** on drug treatment, **4%** on prevention, **5%** on aftercare, **6%** on sobering-up stations and less than **2%** on coordination, research and evaluation
- **CZK 938.0 million (€ 35.5 million)** was spent by health insurance companies on the treatment of substance users
- the state revenues account for **CZK 60 billion (€ 2,269 million)** annually on excise duties on tobacco products, and **CZK 13 billion (€ 492 million)** on excise duty on alcoholic beverages
- **23 billion** cigarettes are consumed annually in the Czech Republic, which corresponds to approximately **2,000** cigarettes per capita
- **166.7 litres** of alcohol per capita are consumed annually, corresponding to **10 litres** of pure alcohol per capita

- **CZK 33 billion (€ 1,248 million)** were lost by players in gambling in the Czech Republic, with **CZK 393 billion (€ 14,864 million)** invested in gambling and **CZK 360 billion (€ 13,616 million)** paid out in winnings
- **15 thousand** offences were committed under the influence of addictive substances (**68%** under the influence of alcohol and **32%** under the influence of other drugs)

Table 0-4: Estimates of the social costs of addictive behaviour in the Czech Republic

Addictive behaviour	**Social costs in CZK (in EUR)**
Smoking	CZK 80-100 billion (€ 3,026-3,782 million)
Alcohol consumption	CZK 50-60 billion (€ 1,891-2,269 million)
Use of psychoactive medicines	n. a.
Use of illicit drugs	CZK 7 billion (€ 265 million)
Gambling	CZK 14-16 billion (€ 530-605 million)

1

Chapter 1:
Public health impact of addictive substances

Globally, substance use is one of the most important risk factors contributing to overall mortality and morbidity and is thus an important determinant of population health [1]. Tobacco use ranks fourth and alcohol and illicit drugs together rank eighth on a list of 84 preventable risk factors monitored. Cumulatively, substance use accounted for 28.5% of the global health burden measured as DALYs (Disability-Adjusted Life Years), i.e. years of life lost due to morbidity and mortality explainable by the risk factors studied.

Cardiovascular diseases, respiratory diseases and malignant neoplasms account for the largest proportion of the health burden caused by tobacco smoking [1, 2]. Passive exposure to tobacco smoke accounts for approximately 13% of the health burden caused by smoking. The use of alternative nicotine products is associated with lower public health risks than tobacco smoking, and some of these products are effective in smoking cessation.

Alcohol is one of the leading causes of morbidity and premature mortality in developed countries. Cardiovascular diseases, neoplasms, gastrointestinal diseases (especially liver diseases) and external causes of morbidity and mortality such as accidents, injuries or poisoning account for the largest proportion of the health burden of alcohol [2, 3]. Alcohol is also a common cause of harm in the user's environment (fetal alcohol syndrome, violence, accidents, loss of productivity, etc.). There is a clear relationship between the amount of ethanol contained in alcohol consumed and adverse health outcomes, with any amount of alcohol (i.e. as little as one drink per day) posing a risk of adverse outcomes. No dose of alcohol can be recommended as beneficial or considered safe [4, 5].

The misuse or abuse of psychoactive medicines affects a relatively large proportion of the population and represents a cause of health disorders and negative social impacts on both the users and their surroundings. According to the overarching definition proposed by Küfner et al. [6, p. 13] misuse of medicines is defined as such a use of psychoactive medicines either obtained with or without a prescription, but clearly used outside accepted medical practice or guidance, for recreational purposes or as part of self-treatment, where the risks and problems associated with use outweigh the benefits.

For people who use illicit drugs, infectious diseases, diseases of the digestive system (especially hepatitis C and its clinical consequences) and external causes of morbidity and mortality, i.e. overdose poisoning, accidents, suicide, represent the main contributors to overall morbidity and mortality.

Gambling, in combination with other biological and psychological factors, can result in loss of control over gambling behaviour, i.e. a gambling disorder, problem or pathological gambling, which is characterised by high intensity and episodic gambling, high financial losses and negative impacts on the gambler and those around them, including psychiatric comorbidity and increased risk of suicide [7].

Addictive substances, as well as other forms of addictive behaviours, are a source of significant health burden and social harm. In the Czech Republic, 16-18 thousand people die annually as a result of smoking, an estimated 6 thousand people die as a result of alcohol consumption, 100 people die as a result of the overuse of psychoactive medicines and 150 people die as a result of the use of illicit drugs. Approximately 5% of hospital admissions for injuries are substance-impaired cases, and 5% of traffic accidents were caused by substance-impaired drivers, in both cases most commonly alcohol.

In addition to negative health impacts, addictive behaviour is associated with widespread social impacts in the areas of housing, employment, debt issues including foreclosures, impacts on families and the community.

2

Chapter 2:
Supply, markets and availability of addictive substances

The supply of tobacco and nicotine products, alcohol and gambling is legal in the Czech Republic and the market is controlled by a number of state authorities and institutions. Their market entering is subject to excise duty and other taxes.

Other substances, that are placed on the list of narcotic drugs and psychotropic substances, may only be marketed as medicines or used for research purposes. Marketing them outside that context is illegal. The possession of narcotic drugs and psychotropic substances for personal use is also illegal – in small quantities as a misdemeanour, in larger quantities as a criminal offence.

According to the Czech Statistical Office estimates, household expenditures on alcohol in 2020 amounted to approximately CZK 98 billion (€ 3,707 million), approx. CZK 110 billion (€ 4,160 million) for tobacco products and about CZK 10 billion (€ 378 million) for illicit drugs. Players lost about CZK 33 billion (€ 1,248 million) in gambling in 2020. Altogether, this amounts to about CZK 250 billion (€ 9,455 million), which corresponds to about 10% of total household expenditures.

2.1 Tobacco, nicotine and related products

The availability of tobacco and nicotine products is very high in the Czech Republic. They can be sold in grocery stores, newsagents, petrol stations, etc. Their sale is a free trade.

According to Act No. 65/2017 Coll., on the Protection of Health against the Harmful Effects of Addictive Substances (APHAS), there is a ban on sales to minors, a ban on sales in vending machines or on the internet if the age of the purchaser cannot be verified, and a ban on the production, import and sale of food products and toys that imitate the appearance of tobacco products. There is also a total ban on smoking in all restaurants, bars, cafés, wine bars and other establishments serving meals (this does not include e-cigarettes and water pipes), a ban on smoking in public transport vehicles and at public transport stops, a ban on smoking in zoos (this does not include e-cigarettes), schools, hospitals, sports halls, playgrounds, entertainment venues and shopping centres.

Industrially produced cigarettes are the most common tobacco products used in the Czech Republic, followed by tobacco intended for hand-packing cigarettes. In the Czech Republic, about 23 billion cigarettes are consumed annually, which corresponds to 2,000 cigarettes or 100 packs of cigarettes per capita. There are about 5 thousand different tobacco or herbal smoking products on the market, including about 490 brands of cigarettes.

The supply of alternative products in the Czech Republic is growing – they currently occupy approximately one tenth of the market volume of tobacco and nicotine products. As of June 2021, there were around 5 thousand different e-cigarette products registered on the market in the Czech Republic. Several brands of heated tobacco products are available, and the range of nicotine pouches is expanding.

The price of cigarettes and tobacco has been rising due to the increase in excise duty. In 2020, the price of a cigarette pack rose by approximately CZK 12 (€ 0.45) and in 2021 by another CZK 8 (€ 0.30), with modest increases planned also for 2022 and 2023. Approximately 80% of the price of cigarettes is paid to the state – 60% in excise duty and 21% in VAT. In 2019, excise duty was also introduced on heated tobacco products. Its rate is lower than that of traditional cigarettes, taking into account, among other things, the different health risks of different types of tobacco products.

The state currently collects around CZK 60 billion (€ 2,269 million) in excise duty on tobacco products per year, in 2020 it corresponded to 4% of the state budget revenue. It is estimated that up to 30% of cigarette sales are made by foreign citizens in border areas with Germany and Austria, the reason being the lower price of cigarettes in the Czech Republic.

2.2 Alcohol

The availability of alcoholic beverages is also high in the Czech Republic. Alcohol can be sold at any time of the day or night and in many places, in any grocery store, snack stands, public transport, petrol stations, etc. A licence is required for the production, sale and serving of spirits; the sale of other alcoholic beverages is a free trade.

The availability of alcohol is restricted by law (No. 65/2017 Coll.), through a ban on the sale of alcohol to minors (under the age of 18 years), a ban on the remote sale of alcohol if the purchaser's age cannot be verified, the sale of toys imitating the shape and appearance of alcoholic beverage packaging, and a ban on the sale or serving of alcohol in healthcare facilities, schools and educational establishments, facilities for the social and legal protection of children, and at events intended for persons under the age of 18. At the same time, the act regulates the occasional sale of alcohol and eases or removes restrictions on a number of public events.

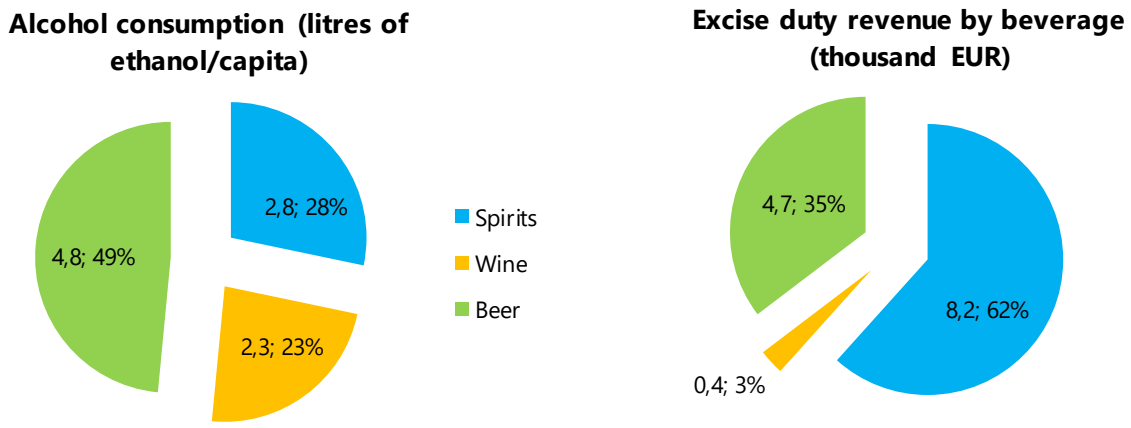
The domestic production of spirits is prohibited by law; beer or wine can be produced at home in a quantity of up to 2,000 litres per household. A situation specific for the Czech Republic are the so-called grower distilleries, where growers can have a limited amount of fruit spirit produced from their own fruit cultivation (with a lower excise duty rate).

In the Czech Republic, 100-150 million litres of ethanol are consumed annually, which corresponds to 10-14.5 litres of pure alcohol per capita, including children and the elderly population. Approximately 49% of the total amount of ethanol consumed is consumed in beer, 28% in spirits and 23% in wine. In recent years, 11-14% of the ethanol consumed in spirits has been produced in grower distilleries.

In the Czech Republic, all alcoholic beverages are subject to excise duty. The Excise Act sets different rates for alcohol, beer and wine. The different rates are also based, among other things, on EU law, which defines minimum excise duty rates. The tax rates for different alcoholic beverages are set unevenly in relation to the amount of ethanol. For an alcoholic beverage containing 10 g of ethanol, the excise tax paid varies depending on the type of alcoholic beverage: for wine it is CZK 0, for beer about CZK 1 (€ 0.04), for spirits CZK 4 (€ 0.15) and for fruit spirits from a grower distillery CZK 2 (€ 0.08), for liqueur wines CZK 1.5 (€ 0.06).

The state collects about CZK 13 billion (€ 492 million) in excise duty on alcoholic beverages a year, of which the majority (61%) is in excise duty on alcohol and approximately one third (35%) in excise duty on beer. The revenue from the collection of excise duty on alcohol accounts for less than 0.9% of the total revenue of the state budget of the Czech Republic. It is clear that the collection of excise duty on individual types of beverages does not correspond to the amount of ethanol consumed in individual types of alcohol in the Czech Republic – Figure 2-1. It is evident that the setting of tax rates for individual types of alcoholic beverages does not correspond to their public health hazard and does not create a systemic incentive to consume low-alcoholic beverages and low-volume packaged beverages.

Figure 2-1: Consumption of alcoholic beverages in litres of ethanol per capita and total excise duty revenue in thousand EUR according to beverage type, 2019



Source: NMC according to data from the Czech Statistical Office and the Ministry of Finance of the Czech Republic

2.3 Psychoactive medicines

The availability of psychoactive medicines in the Czech Republic for treatment, but also for problematic use, is high. Prescription of psychoactive medicines is the basic measure against the misuse of medicines.

The source of misused psychoactive medicines is mainly the official healthcare system – people who misuse medicines obtain them from doctors of various specializations (so-called doctor shopping), from family or friends, on the internet or on the illicit drug market.

A specific way of obtaining psychoactive medicines is by forging prescriptions, or obtaining drugs from medical or household waste. Medicines containing ephedrine (or pseudoephedrine) or codeine are a source for the production of other drugs.

Medicines used for the opioid substitution treatment leak from standard medical sources and traded on the illegal market (in the Czech Republic this concerns mainly medicines containing buprenorphine). The availability of psychoactive medicines, especially opioids, sedatives and hypnotics, on the internet is high, even on online platforms in the Czech language. However, their price can be significantly higher compared to the price in the pharmacy, and the quality is without guarantee. There are also fake medicines on offer containing a different active ingredient.

The so-called new benzodiazepines, which are not registered medicines, are sold as new synthetic drugs (or designer drugs). Synthetic opioids such as fentanyl derivatives are also available.

The distribution of benzodiazepines in the Czech Republic is estimated at 45 million recommended daily doses (RDDs) per year, or 4.2 RDDs per capita. The most widely used or distributed benzodiazepines include alprazolam (e.g. Neurol), diazepam and clonazepam. Over 80 million doses of Z-drugs were distributed to pharmacies in 2020, i.e. 7.5 daily doses per 1 inhabitant of the Czech Republic. Most of this amount is represented by zolpidem (e.g. Stilnox). The amount of benzodiazepines and barbiturates distributed in the Czech Republic has been declining for a long time, while the amount of sedatives from the Z-drug group has been increasing for a long time (it doubled between 2014 and 2020), and the consumption of opioid analgesics has almost tripled in 15 years. Consumption of the antiepileptic and sedative pregabalin has also been rising sharply.

Over 500 thousand daily doses of buprenorphine substitution therapy were distributed in 2020. Products that leak from standard medical sources are illegally traded.

2.4 Illicit drugs

The subjectively perceived availability of illicit drugs has remained the same over the long term, with cannabis being considered easily available by 1/3 of the population aged over 15 years, ecstasy by 20%, and hallucinogenic mushrooms and methamphetamine by 13%.

The attitudes of the Czech population towards the use of illicit drugs have been stable in the long term, with a slight increase in the tolerance towards the use of cannabis and other illicit drugs.

According to the latest estimate of illicit drug consumption, approximately 20.1 tonnes of cannabis, 6.5 tonnes of methamphetamine, 0.7 tonnes of heroin, 1.0 tonne of cocaine and 1.2 million ecstasy tablets were consumed in the Czech Republic in 2016. Estimates of the consumption of cannabis drugs and heroin are declining over the long term, while estimates of methamphetamine and cocaine consumption are increasing. Estimates of household expenditures on illicit drugs have long been around CZK 10 billion (€ 378 million), i.e. 0.4-0.5% of total household expenditures.

The Czech Republic is a country where drugs are imported, but it is also a producing country. Methamphetamine is produced in the Czech Republic and cannabis is grown, both on a subsistence and commercial basis. Other illicit drugs are imported to the country, and the import of methamphetamine into the Czech Republic has also been reported. The main precursor for the production of methamphetamine is pseudoephedrine extracted from pharmaceuticals, which are mainly smuggled in from abroad.

The measures related to COVID-19 pandemic during 2020 and 2021 were reflected in an increase in the supply of illicit drugs online and in the increase in seizures in international mail and shipping (e.g. in the case of cocaine).

In the Early Warning System for New Drugs coordinated by the National Monitoring Centre for Drugs and Addiction, 14 new psychoactive substances were reported in the Czech Republic in 2020, 5 of them for the first time. The most common were synthetic cathinones.

The Police of the Czech Republic and the Customs Administration of the Czech Republic detected almost 170 indoor cannabis cultivation facilities in 2020. Over the last decade, the proportion of small home cultivation plants detected has been increasing and the proportion of detected cultivation plants with a production capacity of more than 500 plants has been decreasing. Cannabis consumption in the Czech Republic in 2020 was mainly covered by domestic production. 160 methamphetamine laboratories were detected; these were mainly smaller laboratories supplying the domestic market.

The availability and purity of cocaine imported from South America and ecstasy imported from the Netherlands and Belgium are increasing. Heroin enters the Czech Republic mainly via the so-called Balkan route.

In 2020, 645 kg of cannabis dry matter and 15 thousand cannabis plants, 29 kg of methamphetamine, 3 kg of cocaine and 250 g of heroin were seized in the context of drug crimes. The amount of ecstasy seized was 89,000 tablets and 21 kg in crystal form. Approximately 250 grams of heroin were seized.

2.5 Gambling

The availability of gambling in the Czech Republic is very high; it is decreasing in the case of land-based gambling venues and increasing in the case of online gambling. The market share of online gambling has been growing for a long time, reaching 48% in 2020. Without distinguishing between online and offline gambling, technical games accounted for 46% of the market, betting for 25%, lotteries for 24% and casino games for 4%. The share of online betting and lotteries has been increasing in the long term, while the share of technical games in lad-based establishments has been decreasing.

As of 1 January 2021, a total of 51 companies were licensed to operate gambling in the Czech Republic, only 2 of them were not based in the Czech Republic. A total of 8 companies operated lotteries (3 of which were online), 8 odds betting (6 of them online), 44 operated technical games (8 of them online), 36 casino games (5 of them online) and 1 bingo.

Technical games (especially gaming machines) can only be operated in land-based gambling venues and casinos, while legally operated odds betting and lottery establishments, which require staff assistance, have started to appear in restaurants and bars. Games on these devices have very risky characteristics.

The number of venues with technical games (TG) has been decreasing since 2011, with the number of establishments with casino games and/or technical games permitted as of 1 January 2021 reaching up to 1 007, i.e. 9 per 100,000 inhabitants of the Czech Republic. Due to legal requirements, TG and casino games are concentrated in larger gambling venues and casinos. For the first time in history, there were more casinos (532) than gambling venues, with their share increasing to 53%.

As of 1 January 2021, there were more than 2 thousand odds betting agencies in the Czech Republic, but in recent years most of the betting has moved online. Places where lotteries and scratch cards can be offered are not regulated in the Czech Republic. The lottery can be wagered at nearly 15,000 locations – at terminals in newsagents, petrol stations or restaurants, grocery stores, post offices and betting agencies. Scratch cards are even more accessible.

The gambling tax has two rates: 23% for odds betting and casino games (and also for marginal totalizator games, bingo, raffle and small-scale tournaments) and 35% for lotteries and technical games. For lotteries, the rate was increased from 23% to 35% from 2020.

Revenue from the gambling tax is divided between the municipalities and the state. For technical games at a ratio of 35 to 65 in favour of the municipalities, for the other games at a ratio of 70 to 30 for the benefit of the state. The proceeds from the taxation of technical games are distributed to specific municipalities according to the number of technical gaming positions in gambling venues and casinos in their territory. This also applies to the proceeds from the taxation of online technical games (CZK 2.1 billion in 2020/€ 794 million), which are available regardless of the availability of technical games in gambling venues and casinos.

The tax revenue from gambling in 2020 reached up to CZK 10.1 billion (€ 382 million) The collection of tax on technical games was CZK 5.5 billion (€ 208 million) and CZK 4.6 billion (€ 174 million) from other games. Revenues to municipal budgets were CZK 4.9 billion (€ 185 million) and CZK 5.1 billion (€ 193 million) to the state budget. The state's share of gambling tax revenue has been increasing over the long term, and was 51% in 2020.

In relation to the COVID-19 pandemic, the operation of gambling venues, casinos and betting agencies was suspended in 2020 and 2021 for a total of three periods: from 13 March to 25 May 2020, from 12 October to 3 December 2020 and from 18 December 2020 until 30 May 2021. The operation of gambling venues, casinos and betting agencies was thus suspended for approximately one third of 2020. In the spring of 2020, there was a complete halt to sports competitions almost worldwide and many major sporting events were cancelled in the following period of 2020 and 2021, significantly reducing opportunities for odds betting.

Players lost a total of CZK 33 billion (€ 1,248 million) in gambling in the Czech Republic in 2020. A total of CZK 393 billion (€ 14,860 million) were invested into the games and CZK 360 billion (€ 13,616 million) were paid out in winnings.

3

Chapter 3:
National addiction policy

Since 2014, the addiction policy of the Czech Republic has gradually integrated the topics of licit and illicit substances and behavioural addictions.

The national legal framework for the implementation of measures to protect against the harm caused by the use of addictive substances is contained in Act No. 65/2017 Coll., on the Protection of Health against the Harmful Effects of Addictive Substances (APHAS). The basic legal framework for dealing with addictive substances is Act No. 167/1998 Coll., on Addictive Substances (AAS).

3.1 Tobacco control and alcohol policy

The legal framework for tobacco control is contained in the WHO Framework Convention on Tobacco Control (FCTC). The WHO Framework Convention on Tobacco Control entered into force in 2005, and the Czech Republic was the last of the EU countries to ratify the Convention in 2012.

The WHO recommends 6 priority tobacco control policy strategies to help countries in implementing the measures set out in the FCTC [8, 9]:

(1) tobacco use monitoring and tobacco control policies,
(2) consistent enforcement of smoking bans in public places,
(3) support for smoking cessation services,
(4) warnings against the harms of smoking,
(5) enforcing the prohibition of advertising, promotion and sponsorship,
(6) raising the price of tobacco by increasing excise duties.

The harm reduction approach of reducing the risks of tobacco or nicotine use is based on the growing body of research and data available in this area. It involves smokers switching to lower-risk oral and smokeless tobacco and nicotine products such as chewing tobacco, nicotine pouches, e-cigarettes and heated tobacco products.

However, this approach is not sufficiently used in the national tobacco control policy in the Czech Republic. This is mainly due to concerns that acceptance of alternative nicotine products will lead to a re-normalisation of smoking and undermine the tobacco control strategies recommended by the WHO. There are also concerns that alternative nicotine products are a gateway to smoking for ex-smokers and non-smokers, especially children and adolescents. However, available studies show that offering alternative products does not lead to the normalisation of tobacco smoking and is an effective substitute for smoking.

In the field of alcohol, there is international expert consensus on 5 key recommendations for effective policies to reduce the negative impacts of alcohol consumption [10, 11]:

(1) raising the price of alcohol through excise taxes and pricing policies,
(2) limiting the availability of alcohol,
(3) prohibiting or strictly regulating alcohol advertising,
(4) availability of screening, brief interventions and treatment,
(5) measures against driving under the influence of alcohol.

Some of these international recommendations are not consistently applied in the Czech Republic.

3.2 Policy on psychoactive medicines and illicit drugs

Czech legislation on the control and regulation of the handling of narcotic drugs and psychotropic substances (addictive substances), including drugs containing them, is significantly influenced by

obligations arising from international documents, i.e. in particular the Single Convention on Narcotic Drugs of 1961 and the Convention on Psychotropic Substances of 1971.

The basic legal framework for dealing with addictive substances is Act No. 167/1998 Coll., on Addictive Substances (AAS). Healthcare workers, criminal justice authorities and statutory laboratories may handle addictive substances without special permission. An amendment to the law in 2021 introduced electronic prescriptions instead of the blue-stripe paper-based doctor's prescriptions used until now, which should reduce the possibility of forgery of these prescriptions.

Unauthorised handling with addictive substances is a criminal offence. Act No. 40/2009 Coll., the Criminal Code, defines 4 so-called drug offences: (1) production, distribution and handling with addictive substances (Section 283), (2) possession of addictive substances for personal use (Section 284), (3) production and possession of items intended for the production of addictive substances (Section 286), (4) promotion of drug use (Section 287). For the purposes of the Criminal Code and subsequent criminal liability, the specific substances are specified by the AAS, by reference to their list in Government Regulation No. 463/2013 Coll., on the lists of addictive substances. Possession of small amounts of addictive substances and the cultivation of plants or mushrooms containing addictive substances is a misdemeanour under the AAS.

The protection of health against the harmful effects of addictive substances, including psychoactive medicines, as well as the supervision of pharmaceuticals, falls under the responsibility of the Ministry of Health. The State Institute for Drug Control (SIDC) falls under the Ministry of Health and its competences include the prices and reimbursement of medicines, their clinical evaluation and market authorisation, supervision over advertising, production, preparation, sale, distribution, dispensing of medicines and their safety, including their abuse (pharmacovigilance system). The basic legislative framework for systemic measures against the abuse of psychoactive medicines is provided by Act No. 378/2007 Coll., on Pharmaceuticals.

The basic measure against the abuse of medicinal products is prescription or restricted dispensing (either prescription or non-prescription), which is the purpose of the Register for Restricted Medicinal Products. As of May 2021, it contained no sedatives, hypnotics or opioids, and only 5 preparations containing pseudoephedrine and medical cannabis. Another measure is the dispensing of medicines only in pharmacies, which will not dispense medicines if there is any doubt about the correct use.

3.3 Gambling policy and control

The gambling sector is part of the integrated addiction policy, the regulatory authority for gambling is the Ministry of Finance.

Since 2017, the basic legislative framework for the regulation of gambling is Act No. 186/2016 Coll., on Gambling (AG), which regulates the conditions for the operation of gambling in the Czech Republic and the competence of administrative authorities in the field of gambling operation. It replaced the older Act No. 202/1990 Coll., on lotteries and similar games. The AG enabled the creation of the Registry of Persons Excluded from Participation in Gambling. Since 2017, the Customs Administration (CA) and the Ministry of Finance have been the authorities in charge of supervising compliance with the AG.

The AG was amended in 2020 (with effect from 1 January 2021) in parts concerning, for example, the recording and reporting of gambling operations, the register of persons excluded from gambling, self-limiting measures and control and supervision of gambling operations. In addition to people who have requested it themselves, the Registry of Excluded Persons also includes by law recipients of assistance in material need (social allowances), people in insolvency or people who have been banned from gambling by a court. In April 2021, approximately 200 thousand persons were registered in the register, of whom 1 thousand were registered at their own request.

The Ministry of Finance prepared a comprehensive evaluation of the new gambling regulation (the so-called ex-post RIA assessment) during 2020 and 2021.

Municipalities may prohibit or restrict the operation of technical and casino games by means of a general binding decree (GBD). In 2020, 700 municipalities had such a decree, of which approximately 450 banned technical games altogether. All 35 of the most populous cities and almost all cities with more than 20,000 residents had issued the decree.

3.4 National addiction strategy

The *National Strategy for the Prevention and Reduction of Harm Associated with Addictive Behaviour 2019-2027*, approved by the Government in May 2019, is currently in force. Its main objective is to prevent and reduce the health, social and economic harms resulting from substance use, gambling and other addictive behaviours and from the existence of legal and illegal markets for addictive substances, gambling and other products with addictive potential. The main areas of intervention in the field of addiction policy in the Czech Republic are prevention, risk and harm minimisation, treatment and reintegration, and control and supply reduction.

The *National Strategy 2019-2027* has 4 priorities:

- strengthening prevention and raising awareness of the negative effects of substance use and addictive behaviour,
- ensuring a high-quality and accessible network of addictology services,
- effective control of markets for addictive substances and addictive products,
- strengthening governance, coordination and effective financing.

Special topics included are the misuse of psychoactive medicines, the overuse of modern /new technologies and the area of cannabis and cannabinoids.

The Government's coordinating and advisory body on drug policy issues is the Government Council for Drug Policy Coordination (GCDPC). Currently, the GCDPC has 23 members. The Prime Minister is the Chair of the GCDPC, and its members are ministers of ministries whose remit includes the issue of drug policy, representatives of state institutions, regions and representatives of expert and professional societies and non-governmental organisations.

At the regional level, regional coordinators ensure the coordination of addiction policy. Local drug coordinators operate at the municipal level. A growing number of municipalities have their own addiction policy strategy.

3.5 Funding of the addiction policy

Addiction policy is funded from two levels: the central level (the state budget) and the regional level (regional and municipal budgets).

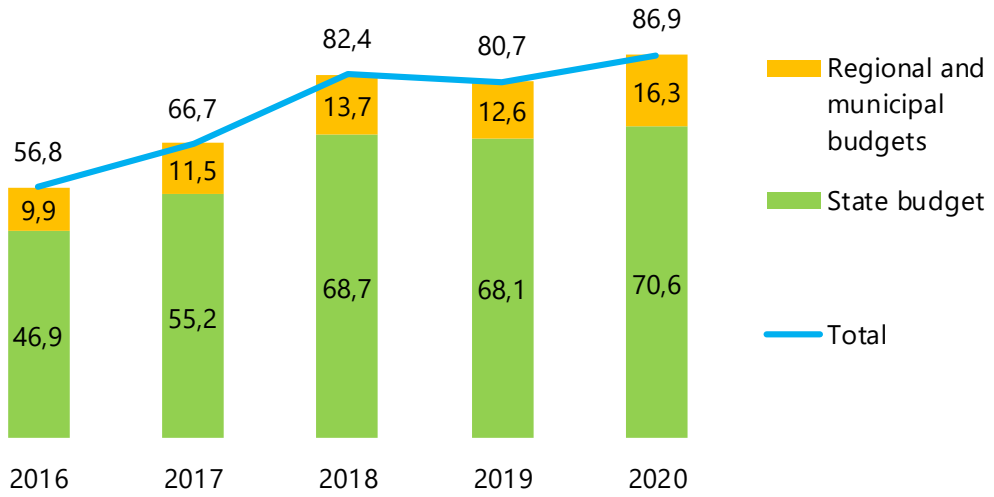
It is not possible to distinguish expenditures on alcohol, tobacco, illicit drugs and gambling policies from available sources.

In 2020, expenditures from the budgets of state and local governments (excluding health insurance expenditure) on addiction policy totalled CZK 2,297.5 million (€ 86.9 million), of which the state budget expenditures amounted to CZK 1,866.6 million (€ 70.6 million) and expenditures from the budgets of local governments totalled CZK 430.9 million (€ 16.3 million), of which CZK 340.6 million (€ 12.9 million) from the regional budget and CZK 90.3 million (€ 3.4 million) from the municipal budget – Figure 3-1. There has been moderate growth in spending at all levels of government over the long term – Figure 3-2.

In 2020, state grant resources from the Ministry of Health and the Ministry of Justice for addiction policy have been centralised into the chapter of the Office of the Government of the Czech Republic.

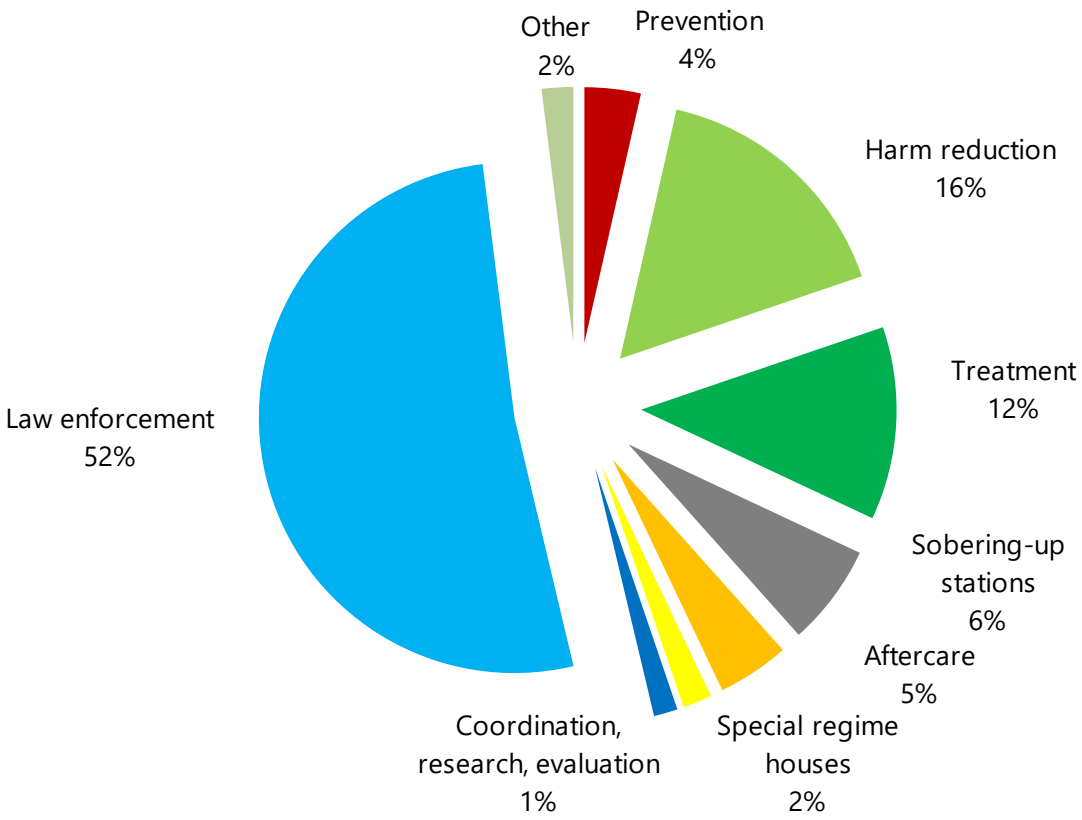
Figure 3-1: Structure of public expenditures on addiction policy (labelled expenditures from public budgets), 2020

Figure 3-2: Trends in labelled drug policy expenditures from public budgets in 2016-2020



Expenditures on law enforcement accounted for 52% of the labelled public expenditures on addiction policy, 16% on harm reduction and 12% on treatment – Figure 3-3. In terms of services, expenditures on harm reduction, sobering-up stations, and outpatient services are increasing. Expenditures on primary prevention have remained stable over the long term (accounting for 3.6% of total expenditures on addiction policy).

Figure 3-3: Structure of public expenditures on drug policy by types of services, 2020



Health insurance expenditures on treatment of substance users in 2020 amounted to CZK 113.4 million (€ 4.3 million) in outpatient care (of which CZK 4.8 million /€ 181 thousand was spent on medicines) and CZK 824.6 million (€ 31.2 million) in inpatient care (of which CZK 20.9 million /€ 790 thousand on medicines). Total expenditure amounted to CZK 938.0 million (€ 35.5 million), of which CZK 201.7 million (€ 7.6 million) was spent on treatment in the field of addictive diseases and CZK 6.7 million (€ 253 thousand) on addiction treatment.

4

Chapter 4:
Addiction prevention

4.1 System framework for prevention

Addiction prevention targeting children and young people is part of a broader framework for the prevention of risk behaviour coordinated by the Ministry of Education, Youth and Sport. The main strategic documents for the field of prevention in the Ministry of Education are the *National Strategy for Primary Prevention of Risk Behaviour in Children and Youth for the period 2019-2027* and its Action Plan. The theme of prevention and health promotion is also part of the *Health 2020* and *Health 2030* strategies.

At the regional level, there are regional school prevention coordinators, and at the level of former districts, there is a network of prevention methodologists in pedagogical-psychological counselling centres (PPCC). School prevention workers (SPWs) work in schools. The majority of school-based SPWs also have other functions, most often as class teachers, and only half of school-based SPWs have completed accredited courses to perform specialized activities. The basic tool of school prevention of risk behaviour is the school's prevention programme, which is developed annually at each primary and secondary school by the school's SPW in cooperation with the school management and other pedagogical staff.

As of May 2019, the system of certifications of the professional competence of prevention programmes, i.e. the system for verifying the quality of primary risk behaviour prevention programmes implemented within the education system by external entities, has been suspended. The renewal of the certification process remains unresolved. The long-term non-functionality of the certification system is a problem for the school prevention system in the Czech Republic, as it allows low-quality programmes to be offered. So far, 80 services providing prevention in addiction have been certified (52 of them in the field of universal prevention, 20 in selective prevention and 8 in indicated prevention). Prevention programmes are now part of the GCDPC system of certification of competency of addiction services and the system of certification of prevention in addiction should therefore be maintained.

Since 2016, the System for Evidence of the Prevention Activities (SEPA) has been in place, created by the Department of Addictology of the 1st Faculty of Medicine of Charles University and the General University Hospital in Prague in cooperation with the National Institute for Education, which serves as a tool for schools in planning prevention activities. Although schools are not obliged to use the system, it is the most widely used tool for monitoring prevention activities in the Czech Republic.

In 2020, the Department of Addictology developed an online training course *Introduction to Evidence-based Prevention* (INEP) for prevention workers (e.g., teachers, police prevention workers, NGO workers, students of faculties of education). The Czech version of the course takes into account the specifics of the development of prevention in the Czech Republic: the broader framework of primary prevention of risk behaviour, the standards of professional competence in primary prevention, the system of coordination of school primary prevention, SEPA, the school prevention programme and the 4-level model of prevention [12].

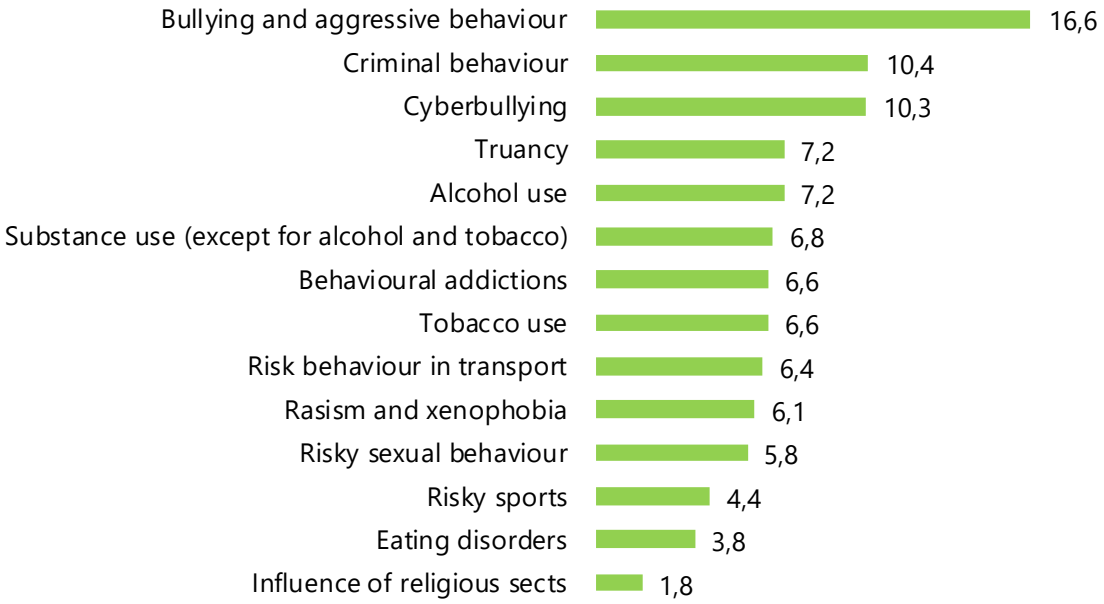
4.2 Universal prevention

Universal prevention programmes target the general population, not selected risk groups or individuals. One of the main target groups for general prevention is the school population. Only a quarter of the stand-alone prevention programmes that were implemented in schools were

certified for professional competence. Prevention programmes in schools most often focus on bullying and aggression, criminal behaviour, cyber-bullying and truancy – Figure 4-1.

As a result of the COVID-19 pandemic, teaching in 2020 was mainly in the form of distance learning and the input of external lecturers at schools was limited. Providers of mainly certified school primary prevention programmes have responded to the situation by moving to an online environment, providing methodological support to teachers, distance support for children and creating new programmes reflecting the current demand of schools [13].

Figure 4-1: Focus of prevention programmes by type of behaviour in the 2019/2020 academic year, %



Source: Klinika adiktologie 1. LF UK a VFN [14]

4.3 Selective and indicated prevention

Programmes of selective or indicated prevention are intended for groups of persons or individuals who are at a higher risk of developing various forms of risk behaviour, i.e. are more vulnerable than other population groups or individuals [15, 16].

There has long been a lack of selective and indicated prevention programmes, with 6% of schools reporting the implementation of selective prevention and less than 2% of schools reporting the implementation of indicated prevention. Certified indicated prevention programmes are completely lacking in the Central Bohemia, Karlovy Vary, Hradec Králové and Vysočina regions. Selective prevention programmes operate in all regions, but 5 of them are supplied by providers from other regions. Indicated prevention implemented by non-governmental organizations is complemented by a network of PPCCs (47 in the Czech Republic in total) and educational care centres (32 with a total of 78 workplaces).

In 2020, few selective prevention programmes were implemented; the online form of work did not suit the specific characteristics of these prevention programmes. Indicated prevention programmes have seen increased demand due to the impact of COVID-19 measures on children and adolescents [17]. The most common problems experienced by children and adolescents in primary prevention programmes included anxiety, anxiety and depression symptoms, fear, isolation, boredom and frustration, the accumulation of violence in families, self-harm, substance use, risky online behaviour and parental drinking.

4.4 Media and information campaigns

A number of media campaigns focusing on addictive substances take place in the Czech Republic every year – events promoting smoking cessation are held on the occasion of the *World No Tobacco Day*, the *Dry February* campaign aims to prevent alcohol use in the adult population; in the area of illicit drugs, the *Staying Above the Influence* campaign targets young people and offers help for problems with alcohol, experimentation with or addiction to illicit drugs or computer games.

The NMC operates several websites for the public on addiction issues: the *National Smoking Cessation Support website* koureni-zabiji.cz, the *National Site to Promote Alcohol Consumption Reduction* alcohol-skodi.cz and the *National Gambling Risk Reduction website* hazardni-hrani.cz.

Since August 2019, the *National Quitline* 800 350 000 has integrated the topics of tobacco smoking, alcohol use, gambling and illicit drugs. The website chciodvykat.cz and e-mail counselling service poradte@chciodvykat.cz were launched.

5

Chapter 5:
Addictology services

5.1 System framework of addictology services

The network of addictology services covers the whole spectrum of problems related to substance use and other forms of addictive behaviour and consists of facilities and programmes of different types of services (health, social, educational). Interdisciplinarity is a strength, but it is confronted with mutual incompatibility and low interpenetration of the different sectoral frameworks within a single programme.

In August 2021, the Office of the Government of the Czech Republic completed a five-year project, *Systemic Support for the Development of Addictology Services within the Integrated Drug Policy* (project DAS), which developed specific methodologies, tools and proposals, including legislative ones, in the areas of networking, quality, reporting and funding of addictology services.

5.2 Network of addictology services

The network of addictology services in the Czech Republic consists of two large groups of programmes:

- Healthcare facilities in the field of psychiatry, or with a specialisation in addictive diseases, historically called AT (alcohol and toxicomania), which provide outpatient and residential health services to people using alcohol, and to a lesser extent to people using non-alcohol drugs and people at risk of problem gambling. In recent years, non-medical addictology clinics for adults or children have been established, linked to the expertise of an addictologist. This network is mainly covered by the public health insurance system, while some specialised centres are also subsidised.
- Prevention programmes, low-threshold programmes, outpatient treatment and counselling programmes, therapeutic communities and aftercare centres, which are mostly registered as social services and are mostly run by non-governmental organizations (NGO), mainly target users of illicit drugs, and to a lesser, though increasing extent, people using alcohol and those at risk of pathological gambling and their relatives. This network is mainly covered by subsidies from the state, regions and municipalities.

There are approximately 250-300 programmes (centres) of various types of addictology services in the Czech Republic. Of these, there are 55-60 low-threshold contact centres, 50 outreach programmes, 90-100 outpatient treatment programmes (10 of which are for children and adolescents), 10-15 detoxification units, 25-30 inpatient healthcare units, 15-20 therapeutic communities, 35-45 outpatient aftercare programmes (20-25 of which are sheltered housing) and 5-7 homes with special arrangements for substance abusers. A total of 60 facilities report patients in opioid substitution treatment and an estimated 600-700 general practitioners also provide opioid substitution treatment.

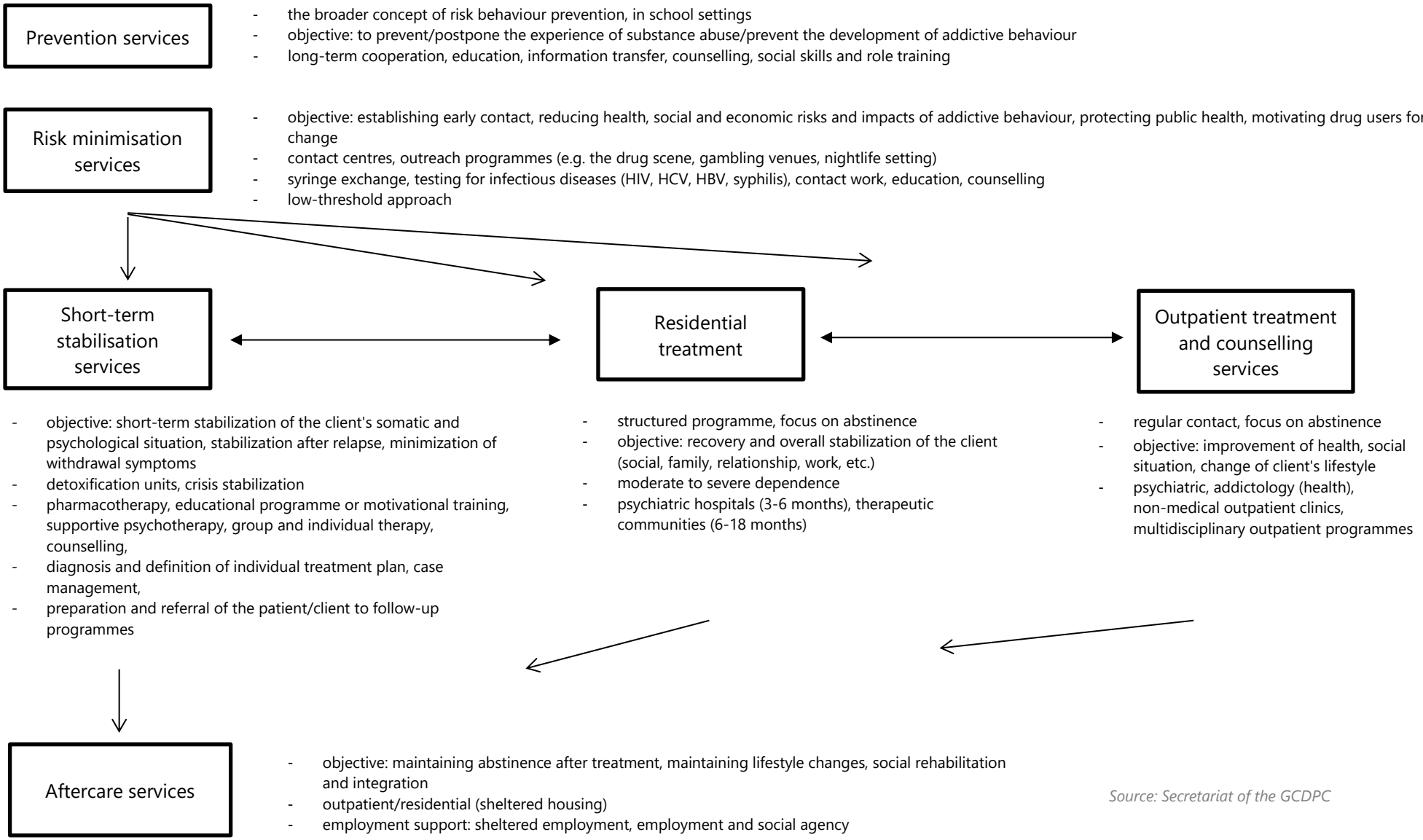
Most regions describe the existing network of services as minimal or insufficient. Significant shortcomings are reported by the regions especially in the availability of outpatient treatment, especially opioid substitution treatment. In particular, there is a shortage of outpatient psychotherapists, psychiatrists and other physicians in the regions to provide health services to people with addiction. Regions also frequently report the absence of addictology programmes specialising in children and young people. Particularly low accessibility across all types of services persists in the Karlovy Vary Region.

In June 2021, the Government Council for Drug Policy Coordination (GCDPC) approved the new *Concept for the Development of Addictology Services*, which sets out the framework and content of

the field of addictology and addiction services, defines their background and principles, and defines 6 basic types of services [18]:

- addictology prevention services,
- risk minimisation (risk reduction) addictology services,
- outpatient addictology treatment and counselling services,
- addictology services for short-term stabilization,
- addictology residential treatment services,
- addictology aftercare services.

Chart 5-1: Network of addictology services in the Czech Republic – typology of services



Source: Secretariat of the GCDPC

Table 5-1: Strengths and weaknesses of the field of addictology according to the Concept for the Development of Addictology Services

Strengths	Weaknesses
multidisciplinary character	uncoordinated passage of the patient through the treatment system
prevention methodology	narrowed spectrum of target groups of selected addiction services
spectrum of services	lack of non-abstinence oriented programmes
offer of intensive individual treatment options	insufficient peer support and self-help programmes
taking into account the individuality of the user	uneven regional accessibility of services
evaluation and quality assurance system	uneven development of services across systems and insufficient networking
monitoring tools	insufficient capacity and availability of certain types of services: substitution treatment, detoxification, post-penitentiary care, protective treatment, child and adolescent care, housing first, day care, housing and employment support, services for the elderly, services for parents with children with addiction burden
education system	lack of some professionals in addictology services (psychiatrists, psychologists, clinical psychologists)
sufficient bed capacity	shortcomings in the system for benchmarking the performance and cost-effectiveness of services
coordination tools	systemic inadequacy of primary prevention in addictology
	lack of an overarching legislative framework for social and health services
	insufficient use of existing coordination tools
	lack of a stable funding system
	imbalance in the remuneration of workers in addiction services

Source: Sekretariát Rady vlády pro koordinaci protidrogové politiky et al. [18]

5.3 Certification of professional competence in addictology services

To ensure minimum quality standards of addictology services, a system of certification of professional competence of services for drug users has been in place since 2006. So far, 10 special standards for 10 types of services have been in force, in November 2021 the GCDPC approved new *Standards of Professional Competence for Addictology Services* developed within the DAS project, which correspond to the new typology of services.

The certification process was suspended at the beginning of 2020 and has not yet been resumed. As of September 2021, a total of 206 programmes had valid GCDPC professional certification (based on the extension of GCDPC certificates), most commonly outreach and counselling services (53) and outreach programmes (53), outpatient treatment programmes (42), aftercare programmes (20), and therapeutic communities (10).

5.4 Treatment and counselling via the internet and new technologies

In recent years, there has been a growing range of treatment and counselling interventions delivered via the internet and using new technologies, with an increasing number of web and mobile applications for people using tobacco, alcohol, illicit drugs, people at risk of problem gambling, and their relatives and closed ones.

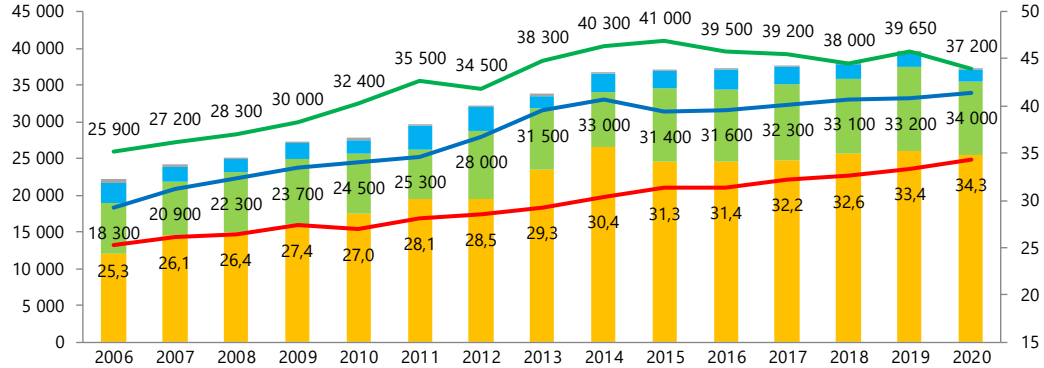
Counselling and harm reduction services use social networking sites to communicate with clients and to reach out to new clients, the use of this type of contact by clients increased during the lockdown period related to the COVID-19 pandemic.

5.5 Risk minimisation services

Harm reduction interventions (risk minimisation) for people who use drugs are provided in the Czech Republic mainly by low-threshold contact centres and outreach programmes, which focus mainly on the prevention of blood/sexually transmitted diseases and on the social and psychological stabilisation of people using drugs. The target population is people who use drugs intensively, especially people who inject drugs (PWID), as well as experimenters, relatives and close ones.

The number of low-threshold programmes has been around 100 for a long time, with a total of 39,000 people who use drugs in contact with them in 2020, including 25,000 methamphetamine (pervitin) users (65%), 10,000 opioid users (26%) and just under 2,000 cannabis users (4%). The programmes estimated an additional 11,000 people in mediated contact. In the long term, there is a gradual increase in the number of methamphetamine users and, in recent years, users of opioids. The proportion of people injecting drugs among clients of low-threshold programmes has been above 80% for a long time, and the average age of clients has been increasing – Figure 5-1.

Figure 5-1: Clients in contact with low-threshold programmes in 2006-2020, by type of substance used



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Inhalants	450	390	300	250	300	250	160	250	160	100	100	100	110	100	70
Cannabis	2 700	2 000	1 700	2 200	1 900	3 200	3 300	1 600	2 500	2 400	2 900	2 300	2 100	2 000	1 700
Opioids	6 900	7 300	8 300	8 900	8 100	6 800	9 200	8 400	7 500	9 900	9 800	10 300	10 150	11 550	10 000
Pervitin	12 100	14 600	14 900	16 000	17 500	19 400	19 500	23 500	26 500	24 600	24 500	24 800	25 600	26 000	25 400
PWUD	25 900	27 200	28 300	30 000	32 400	35 500	34 500	38 300	40 300	41 000	39 500	39 200	38 000	39 650	37 200
PWID	18 300	20 900	22 300	23 700	24 500	25 300	28 000	31 500	33 000	31 400	31 600	32 300	33 100	33 200	34 000
Average age (years)	25,3	26,1	26,4	27,4	27,0	28,1	28,5	29,3	30,4	31,3	31,4	32,2	32,6	33,4	34,3

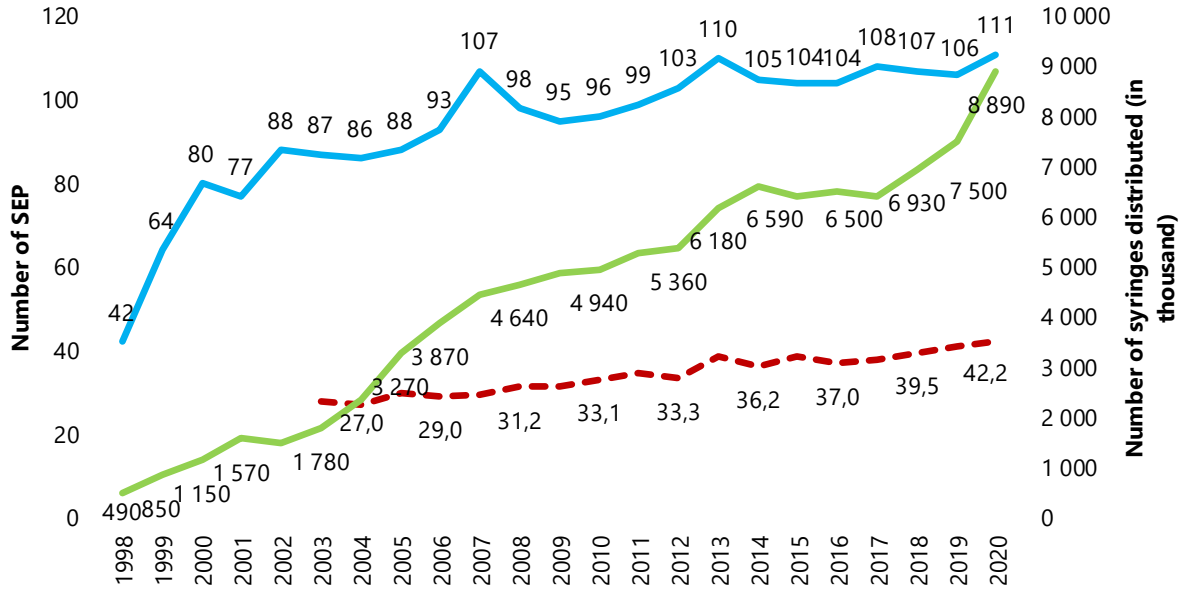
Source: Národní monitorovací středisko pro drogy a závislosti [17]

Due to the high proportion of injecting among people who use drugs (PWUD), the most common service provided is the distribution of injection kits and paraphernalia; the number of health treatment interventions has been increasing over the long term.

The distribution of needles and syringes was carried out by all 111 low-threshold programmes in 2020, amounting to 8.9 million needles and syringes distributed – Figure 5-2 [17]. The average number of syringes per one PWID in contact with the needle and syringe exchange programmes was 261, and 211 per one estimated injecting user per year, which is according to WHO just above the high coverage rate for prevention of HIV transmission [19].[1]

[1] To effectively prevent HIV, WHO recommends to achieve high coverage, defined as the distribution of 200 or more needles and syringes per one injecting drug users per year, with a target of 300 or more by the year 2030.

Figure 5-2: Needle and syringe exchange programmes (SEP), number of syringes distributed (in thousands) and number of people who inject drugs (in thousands) in 1998-2020



Source: Národní monitorovací středisko pro drogy a závislosti [17]

In 2021, a pilot project of naloxone distribution was launched to provide naloxone to clients and other persons around drug users. The project involved 14 low-threshold/substitution programmes, the product distributed is Nyxoid nasal spray containing 1.8 mg of naloxone per dose.

Other effective interventions to prevent deaths available in many European countries, such as drug consumption rooms and drug testing programmes, are not implemented in the Czech Republic. The aim of the drug consumption rooms is to reach marginalised drug users and bring them into contact with a wider network of services, to minimise the acute risks of health complications and fatal overdose related to injecting and inhaling drugs, and to reduce drug use in public. Drug testing programmes allow the identification of substance content and thus prevent health consequences, including death.

In 2020, 79 low-threshold programmes offered HIV testing, 61 for HBV, 88 for HCV and 60 for syphilis. The number of tests conducted has been stable over the last 3 years – the rate of PWID testing in low-threshold programmes has been low for a long time, with approximately 7% of the total estimated number of PWIDs tested for HCV and HIV each year.

The continuum of care in the area of HCV from testing through entry into treatment and successful completion of care is not optimal among PWUD in the Czech Republic. Treatment is usually initiated in fewer than half of the people confirmed to have HCV infection.

Specific harm reduction programmes at dance festivals and music events are not very widespread in the Czech Republic, with 10-18 programmes operating in the nightlife setting in the Czech Republic. There are about 3-5 programmes specialising in nightlife setting in the Czech Republic. Low number of these programmes is related to the limited financial support for these activities.

The free distribution of condoms is performed in 2 prisons through dispensing machines and in 14 prisons condoms are available in visiting rooms without visual and auditory checks. The distribution of syringes or other harm reduction materials is not established in Czech prisons.

An innovative harm reduction approach in the Czech Republic is represented by managed alcohol programmes, i.e. the administration of alcohol to alcohol addicts under controlled conditions. It is a method used especially for severe addicts with several health and social problems (homeless, in trouble with the law, etc.). Since 2020, there have been 2 day centres in Brno operating on this

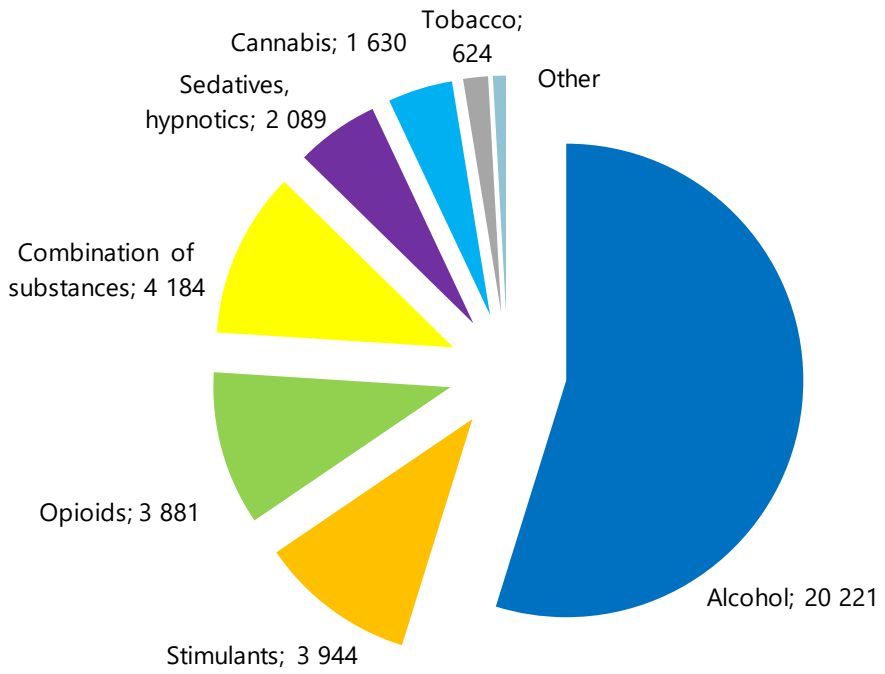
principle (so-called wet centres). In addition, elements of managed alcohol programmes can be found in some homes with a special regime for people with addiction or at risk of addiction.

5.6 Outpatient programmes

The network of outpatient programmes consists of psychiatric outpatient clinics, specialized AT outpatient clinics, addiction outpatient clinics and outpatient social service programmes. Outpatient treatment and counselling is also provided by indicated prevention programmes and other programmes operating under the Ministry of Education.

Approximately two-thirds of the clients of outpatient addiction programmes are men – the relatively highest proportion of men was among the clients of detention centres (83%). The proportion of children and adolescents under 20 years of age is very low – below 5% in almost all types of programmes, with the exception of child and adolescent psychiatry outpatient clinics. Substance users are reported as patients in about 450 psychiatric outpatient clinics, and approximately 35-37 thousand patients seek outpatient treatment annually, of which 20 thousand are alcohol users (55%) and 14 thousand are users of illicit drugs and volatile substances (39%) – Figure 5-3 [20].

Figure 5-3: Clients of outpatient addictology programmes by type of substance used, 2020



Source: Ústav zdravotnických informací a statistiky ČR [20]

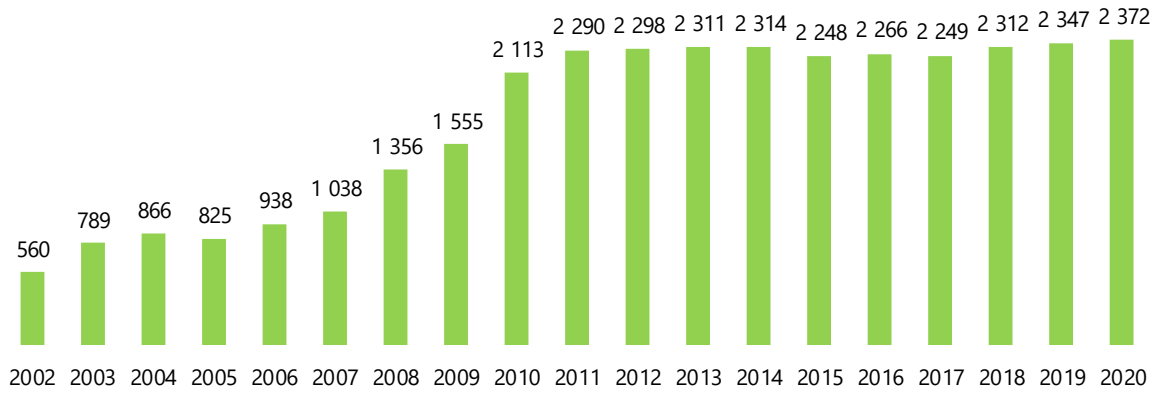
In recent years, systemic activities have been implemented in the Czech Republic in the field of addictological care for children and adolescents, and a network of outpatient addictological care specialised in children and adolescents has been developing.

5.7 Opioid substitution treatment

The number of people reported in the opioid substitution treatment registry has been stable for a long time – Figure 5-4. Approximately 60 healthcare facilities report patients in the registry, and a total of 2.4 thousand people are registered for treatment each year. The only region without an active reporting facility remains the Pardubice Region. The availability of opioid substitution treatment is problematic in all regions of the Czech Republic. On average, 21.4% of the estimated

number of people who use opioids intensively in the Czech Republic in 2020 were registered in opioid substitution treatment.

Figure 5-4: Clients in opioid substitution treatment reported to the National Registry of Treatment of Drug Users 2002-2020



Source: Ústav zdravotnických informací a statistiky ČR [21]

A total of 68% of patients receive opioid substitution treatment with buprenorphine and 32% with methadone. Of the 1,618 people treated with buprenorphine, 798 (46.2%) were taking monotherapy products, most commonly Subutex or Suboxone. The number and capacity of methadone centres have remained almost unchanged over the years. The most common reason for stopping substitution treatment (43%) remains exclusion for treatment violations. Such a high proportion of those excluded for violations of the therapeutic regimen, e.g. for concurrent use of other addictive substances, is contrary to international recommendations (Pompidou Group, WHO and others).

However, a significant number of patients in opioid substitution treatment in the Czech Republic are outside the National Register of Treatment of Drug Users, with an estimated total of up to 5 thousand patients in opioid substitution treatment in the Czech Republic in 2020 [22].

The affordability of substitution preparations containing buprenorphine remains a problem. The combined preparation Suboxone 8 mg has been the only mass-produced substitution preparation covered by public health insurance since 2010, but in practice most patients still pay for buprenorphine preparations from their own resources.

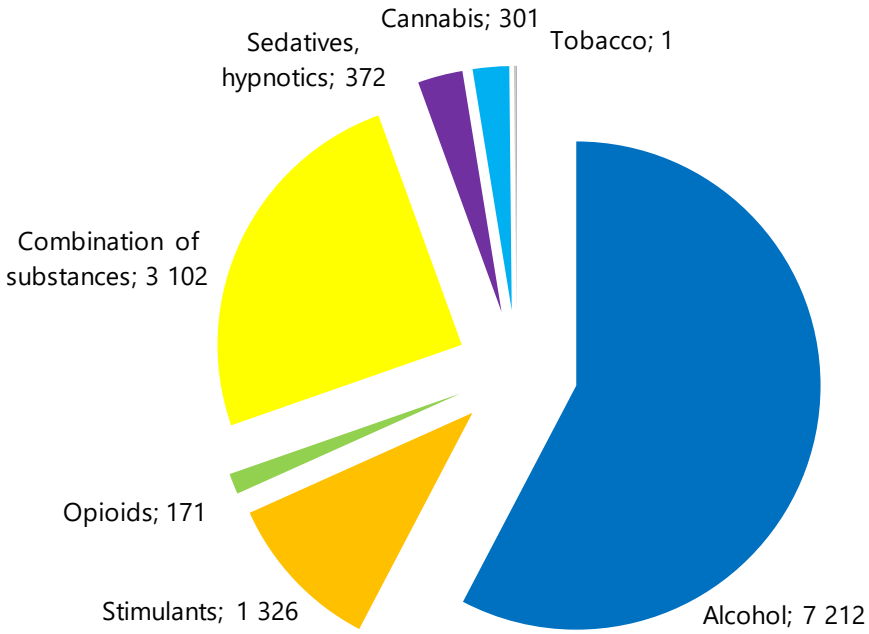
10 prisons in the Czech Republic are licensed to provide opioid substitution treatment, methadone is provided only to continuing patients, and from 2019 it is possible for people entering prison with buprenorphine substitution treatment to continue or start treatment in prison, but patients must pay for the medication themselves.

5.8 Residential programmes

Residential care in the Czech Republic is provided by detoxification and inpatient wards of medical treatment facilities, especially psychiatric hospitals, therapeutic communities, special education facilities and sheltered housing programmes.

Annually, 11-12 thousand people are hospitalized for substance use related problems in psychiatric inpatient facilities, of whom 7 thousand (58%) in connection with alcohol consumption and 5 thousand (42%) in relation to illicit drug use – Figure 5-5. Men make up 70% of long-term hospital admissions, women 30%. The age of treated illicit drug users is gradually increasing.

Figure 5-5: Clients of residential addictology programme by type of substance used, 2020



Source: Ústav zdravotnických informací a statistiky ČR [23]

There are 19 therapeutic communities (TC) in the Czech Republic with an estimated capacity of about 320 places. Clients of the communities are mostly methamphetamine (70.2%), alcohol (16%), heroin (5%) and cannabis (5%) users. The average age of clients was 35.3 years [17].

The system of educational care for children at risk in school facilities of institutional education or protective education and for preventive educational care falls under the Ministry of Education; it comprises of 236 facilities. Specialised wards for the stay of children at risk of drug addiction exist within 6 facilities – the total capacity of these special wards in 2020 was 92 places and 175 children stayed there [24].

5.9 Aftercare treatment

In September 2021, 34 service providers were registered in the Register of Social Service Providers of the Ministry of Labour and Social Affairs, operating a total of 53 programmes, of which 30 were residential.

Approximately 1,000 clients per year use the services of one of the 20 aftercare programmes subsidized by the GCDPC, most often users of illicit drugs, alcohol and clients with a diagnosis of behavioural addiction, and family members and close ones are also in contact with these services [17].

The total capacity of the programmes in 2020 was 403 places, the capacity of sheltered housing was 211 places. 191 clients successfully completed treatment, while 216 clients terminated treatment prematurely. The average length of the programme was 210 days, and the average length of the successfully completed programme was 383 days.

Psychiatric hospitals also provide aftercare services for patients who have received treatment in the facility.

5.10 Addictology services in prisons

The prevention, treatment of addiction and reduction of health and social impacts of illicit drug use are implemented in prisons through drug prevention counselling centres, drug-free zones, specialised departments and programmes of addiction services [25].

Since 2016, addictologist professionals are active in prisons; they are the only staff in here dedicated solely to providing care to individuals with addictive disorders. In 2020, 2.6 thousand people (31% women) were in contact with addictologists. Almost 60% of them reported having injected drugs at some point in their lives. Cannabis (52%), stimulants (19%), opioids (19%) and hallucinogens (7%) were the most commonly used illicit drugs reported.

Drug prevention counselling centres were available in all prisons and their services are used by about 11-12 thousand people per year. Illicit drug users accounted for 83%, a total of 45% reported injecting.

Treatment for addiction during imprisonment was available in specialist units in 14 prisons in 2020, of which 11 prisons had voluntary treatment units. In 2020, the total capacity of specialised units with voluntary treatment was 349 places.

In 2020, it was possible to undergo court-ordered protective treatment in 4 specialized wards in 3 prisons (Opava, Rýnovice, Znojmo). The total capacity of the protective treatment wards was 93 places, and 154 people were cared for in these wards [26].

A total of 22 prisons reported intensive cooperation with NGOs, i.e. 10 or more visits per year. In 2020, the provision of services was significantly affected by the COVID-19 pandemic and the measures implemented by the Prison Service of the Czech Republic in this context (e.g. for part of the year, the entry of NGO workers into prisons was completely prevented).

6

Chapter 6:
Use of tobacco, nicotine and related products and its impact

6.1 The public health impact of smoking

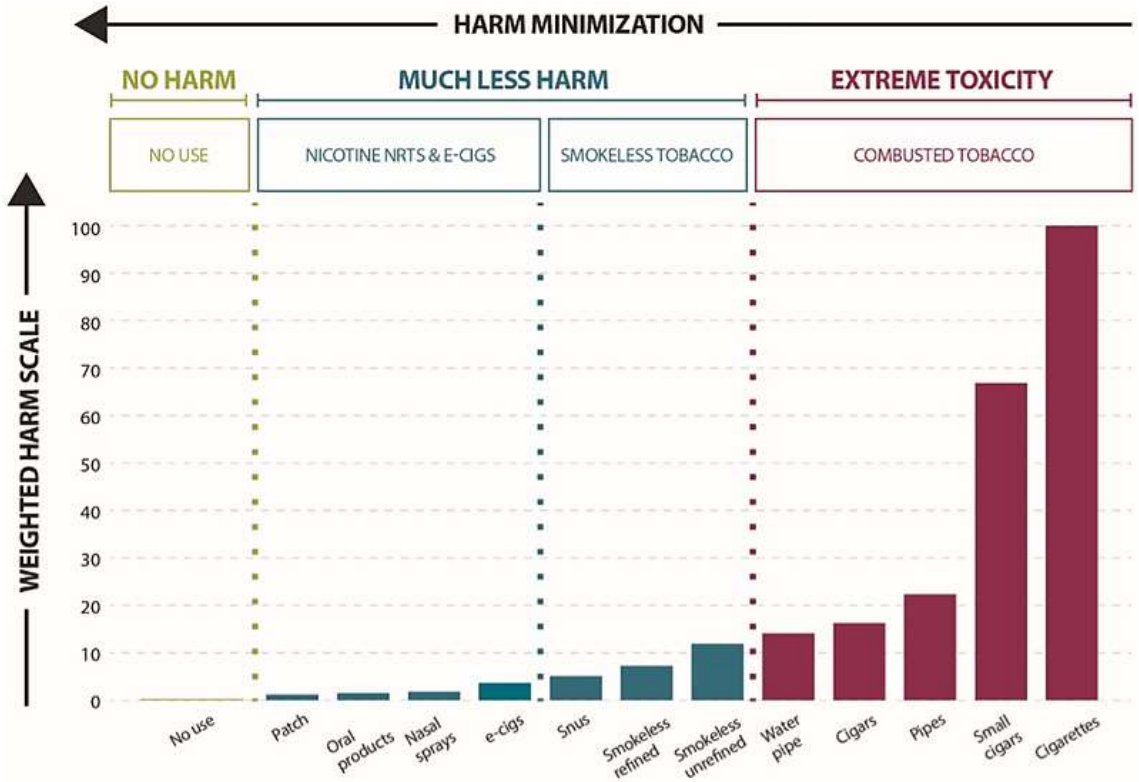
Smoking, together with physical inactivity, is a major cause of mortality and morbidity, especially cardiovascular disease, respiratory disease and malignant neoplasms [1, 2]. Smoking also has an impact on the health of those exposed to tobacco smoke, with passive smoking accounting for around 13% of the health burden caused by smoking. Smokers die on average 15 years earlier than non-smokers [8].

The most common tobacco product used in the Czech Republic is industrially produced cigarettes, followed by tobacco intended for hand-packing cigarettes. Nicotine can be used in ways other than smoking, and there are a number of alternative products to nicotine on the market that do not burn tobacco. These include tobacco and non-tobacco products for oral use (snus or chewing tobacco, or nicotine pouches), heated products that allow nicotine to be ingested via vapour, both tobacco (e.g. IQOS and Glo) and non-tobacco (so-called e-cigarettes), snuff, and nicotine replacement therapy in the form of chewing gum, lozenges and oral spray.

The use of alternative nicotine products is associated with lower public health risks than tobacco smoking – Chart 6-1. Some of them are effective in smoking cessation [27, 28].

The use of alternative nicotine products is a substitute for tobacco smoking, but research suggests that it does not lead to re-normalisation of their use. The increase in the use of alternative nicotine products is one explanation for the decline in smoking among both children and adults [29, 30].

Chart 6-1: Tobacco and nicotine products along the harm minimization continuum

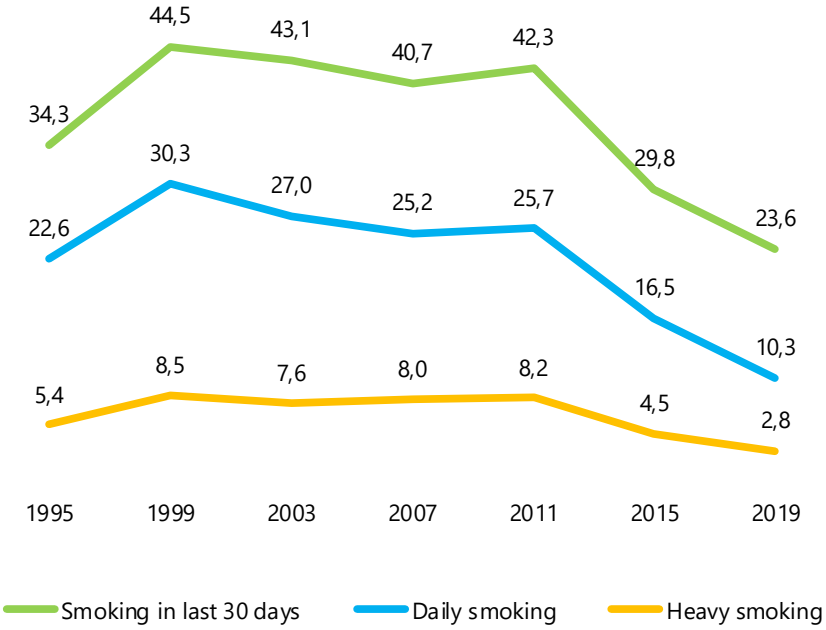


Source: Abrams et al. (2018) according to Nutt et al. [28]

6.2 Use of tobacco and nicotine products among children and youth

About 40% of 15-year-olds and 54% of 16-year-olds have ever tried tobacco smoking. Regular daily smoking is reported by 10-11% of adolescents, but the proportion of underage smokers has been declining over the long term [31] – Figure 6-1.

Figure 6-1: Trends in the prevalence of tobacco smoking among 16-year-olds – ESPAD survey 1995-2019, %



Source: Chomynová et al. [31]

The number of adolescents who have tried e-cigarettes is growing. 60% of the 16-year-olds according to the ESPAD survey have used them in 2019, which is more than the share of the students who experienced riskier cigarette smoking. The decline in smoking among young people can be partly explained by the increase in the use of e-cigarettes. Smoking is more common among adolescents from disadvantaged social groups.

6.3 Use of tobacco and nicotine products in the adult population

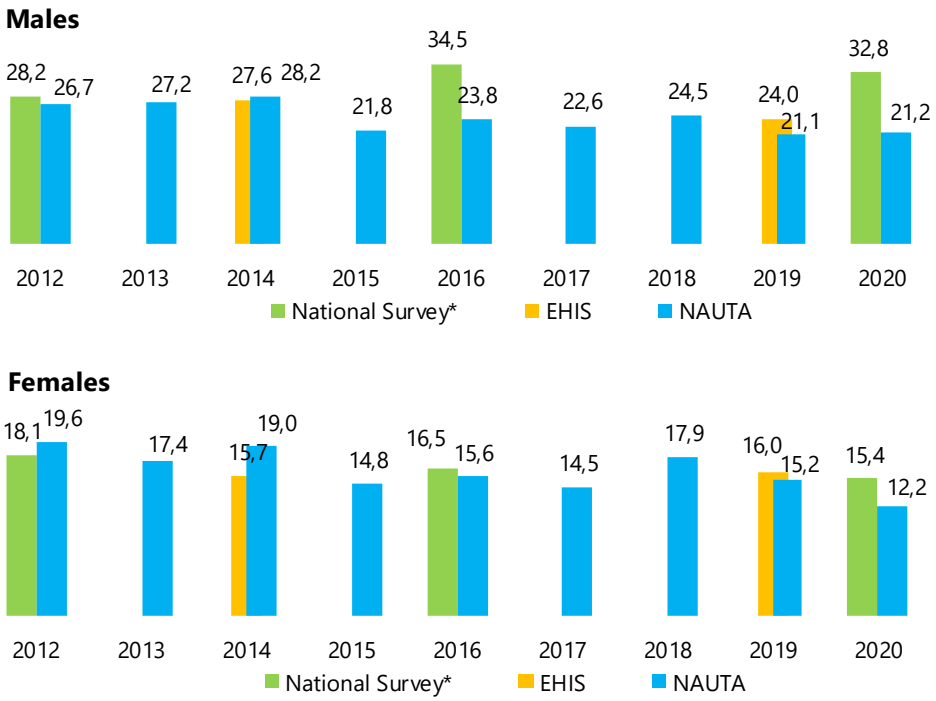
Approximately one-third of the Czech adult population (30-34%) smoke daily, about twice as many men (over 40%) as women (approximately 20%) [32, 33]. The proportion of daily smokers in the Czech population declined slightly until 2015, but has not changed much in recent years – Figure 6-2. In average, one Czech smoker smokes a pack of cigarettes a day.

E-cigarettes are currently used by an estimated 5% of the adult population, almost half of them daily, and heated tobacco products by around 3% [32, 33].

Smoking is perceived as socially acceptable by a large majority of the population (80%), but its acceptability has been declining over the long term. Satisfaction with the smoking ban in restaurants is high and growing over the long term.

Nicotine products sold in pharmacies, chewing tobacco or snuff and water pipe are considered the least harmful of tobacco and nicotine products, with cigarette, pipe or cigar smoking perceived as the most harmful. Smoking a pack of cigarettes daily is considered as risky by over 80% of the population.

Figure 6-2: Trends in the prevalence of daily smoking in the adult population (aged 15+) by gender – comparison of surveys carried out in 2012-2020, % (National Survey on Substance Use, European Health Interview Survey, National Survey on Tobacco and Alcohol Use)



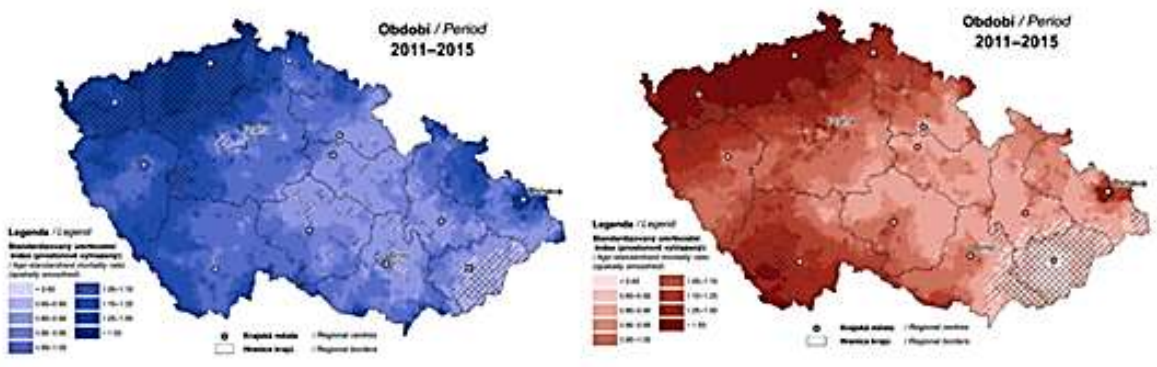
Note.: *The 2012 National Survey results refer to the population aged 15-64.
Sources: Mravčík et al. [34]

6.4 The health impact of smoking

Up to 20% of the population is exposed to tobacco smoke at the workplace and 17% at home. Exposure to tobacco smoke at home was reported by 35% of adolescents aged 13-15 years [35]. Up to 60% of prisoners are exposed to smoke in prisons [36].

Each year, 16-18 thousand people die from smoking-related diseases, which is approximately one-fifth of all deaths in the Czech Republic [37, 38]. This is mainly due to cardiovascular diseases, diseases of the respiratory system and malignant neoplasms. Smokers die approximately 15 years earlier in average compared to non-smokers. Premature mortality is concentrated in regions with a higher prevalence of daily smoking – Map 6-1.

Map 6-1: Premature mortality related to tobacco smoking in the Czech Republic in ages 25-64, men and women, SMR



Source: Kážmér et al. [39]

Approximately 80% of cases of lung cancer and chronic obstructive pulmonary disease can be attributed to smoking.

Lung cancer is the third most common type of cancer and the most common cause of death from malignant neoplasms, with nearly 7,000 new cases diagnosed annually and over 5,000 people dying from it each year. More than 70% of newly diagnosed lung cancers are caught at late stages.

Chronic obstructive pulmonary disease (COPD) is responsible for over 30,000 hospital admissions and more than 3,000 deaths per year, and mortality from this disease has been increasing for a long time.

6.5 Social consequences of smoking

It is estimated that smoking-related social costs in the Czech Republic amount to CZK 80-100 billion (€ 3,026 million) annually, mostly due to medical expenses and loss of productivity.

According to various estimates, spending on cigarettes and tobacco products accounts for 1-4% of Czech household expenditures [40, 41].

Of the 17,000 fires registered in 2020 in the Czech Republic, 6% were caused by smoking, with direct material damage estimated at CZK 44 million (€ 1.7 million).

6.6 Crime related to tobacco use

It is estimated that up to 150 million cigarettes are illegally produced in the Czech Republic every year. The Customs Administration detected 3 illegal production sites in 2020. It detected almost 600 breaches of customs regulations for the marketing of tobacco products and seized 45 million illegal cigarettes and 140 tonnes of tobacco.

The Ministry of Health recorded 2,500 tobacco-related offences, 90% of which were smoking in places where it is prohibited.

About 14% of those convicted committed theft or other illegal acts to obtain funds for cigarettes.

6.7 Prevention and health warnings on the risks of smoking

Since 2016, cigarette packs and the packaging of tobacco and nicotine products in the Czech Republic have carried health warnings in line with the EU directive. Around 15% of smokers interviewed said they had thought about quitting smoking after being confronted with the warnings.

Preventing tobacco smoking in children and young people is part of a broader framework of risk behaviour prevention coordinated by the Ministry of Education. In 2020, the implementation of prevention activities was negatively affected by the situation related to COVID-19 pandemic.

6.8 Smoking cessation and tobacco addiction treatment

Unassisted smoking cessation has a success rate of only 3-5%, treatment in the form of counselling has a success rate of approximately 10%, and 30-35% if accompanied by pharmacotherapy [42].

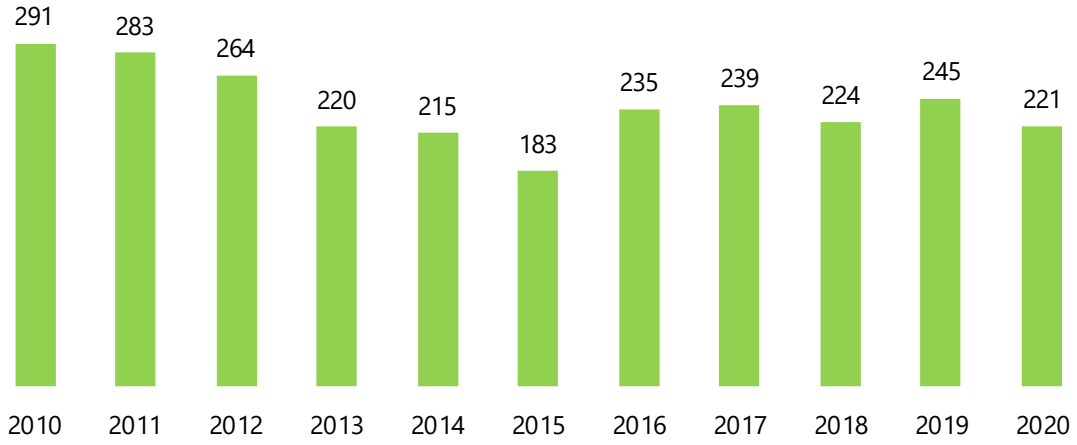
Treatment in the Czech Republic is provided by 43 tobacco addiction treatment centres within hospitals, 200 outpatient doctors, 300 specialised pharmacies and some addictology programmes. The network of centres and doctors is supervised by the Society for the Treatment of Tobacco Addiction.

Since 2016, the *National Quitline* 800 350 000 and the related online counselling service at chciodvykat.cz,[2] has provided structured telephone and email interventions.

Smoking cessation support is also provided by a number of various websites, with the Society for the Treatment of Tobacco Addiction running slzt.cz webpage and the Office of the Government of the Czech Republic running koureni-zabiji.cz website, which is promoted as a link on the mandatory warnings on cigarette packages. There are also several apps for mobile phones that provide counselling in smoking cessation.

There are approximately 400-1000 people with tobacco addiction (dg. F17) treated in outpatient psychiatric treatment annually. In the National Registry of Paid Health Services (NRPHS), only about 200 people were reported to be in outpatient treatment for this diagnosis in 2020; people with tobacco dependence do not seek residential treatment – Figure 6-3.

Figure 6-3: Number of people treated for a primary diagnosis of tobacco dependence reported to the National Registry of Paid Health Services in 2010-2020



Source: Ústav zdravotnických informací a statistiky ČR [23]

Only a third of smokers who see a doctor are advised to quit, despite the fact that brief smoking cessation interventions are mandatory for all health professionals to be carried out. The 2020 estimate is that only half of physicians are doing these interventions.

Nearly one in three smokers has tried to quit smoking in the last year [32, 33], three quarters of them have done so without professional help, and a quarter have used nicotine replacement therapy products available in pharmacies without doctor's prescription. Their recorded consumption indicates a large number of attempts to quit smoking without the assistance of professionals.

In line with the principle of harm reduction, many smokers who are unable or unwilling to give up their nicotine addiction use alternative tobacco and nicotine products that are less harmful than cigarette smoking. However, the use of these products in professional help with smoking cessation is not part of approved recommended practices.

[2] In the beginning, the helpline was focused only on smoking cessation.

7

Chapter 7:
Alcohol use and its impact

7.1 The public health impact of alcohol use

Alcohol is one of the leading causes of illnesses and premature deaths, contributing to the development of more than 200 diseases [43-45]. Cardiovascular diseases, neoplasms, gastrointestinal diseases (especially liver diseases) and injuries due to accidents, injuries and poisoning account for the largest proportion of the health burden of alcohol [2, 3].

The relationship between the amount of alcohol (ethanol) in the alcoholic beverage consumed and harmful health consequences is clear. From the health perspective, it is the amount of ethanol consumed that is important, not the type of alcoholic beverage. From the health perspective, no amount of alcohol can be seen as safe or recommended as healthy [4, 5].

The average daily consumption of more than 20 g of ethanol (1-2 glasses of alcohol) for women and 40 g of ethanol (2-4 glasses) for men is considered risky. Average daily consumption of more than 40 g of ethanol (2-4 glasses of alcohol) per day for women and 60 g of ethanol (3-6 glasses) for men is considered harmful (as a high risk) [46]. Drinking 5 or more glasses on one occasion (binge drinking) poses an additional risk.

The Czech Republic is one of the countries with the highest average per capita alcohol consumption and also a country with the highest incidence of binge drinking in the world [47].

There is international expert consensus on 5 main recommendations for effective policy to reduce the negative impacts of alcohol consumption [10, 11], but these are not consistently applied in the Czech Republic:

(1) restrictions based on affordability and price – taxes, and other pricing policy measures,
(2) restrictions of the territorial availability of alcohol – reducing the number of sales points and measures applied within sales points,
(3) tighter regulation of advertising – banning or severely restricting alcohol advertising, online marketing and social media influencing,
(4) availability of screening, brief interventions and treatment,
(5) measures against driving under the influence of alcohol.

Responsibility for different parts of alcohol policy falls under different ministries (as per the 5 recommendations above):

(1) the area of pricing policy and taxation under the Ministry of Finance,
(2) the area of alcohol as a commodity falls under the Ministry of Agriculture,
(3) the advertising sector under the Ministry of Culture for audio-visual broadcasting and under the Ministry of Industry and Trade for other forms of advertising,
(4) the area of prevention and treatment under the Ministry of Health,
(5) the area of alcohol driving under the Ministry of Transport and the police.

This complicated division of responsibilities makes it difficult to implement an effective alcohol policy and highlights the need for inter-ministerial coordination.

Warnings about the risks and harms of alcohol on packaging are not mandatory in the Czech Republic. The ethanol content in percentage by volume must be indicated.

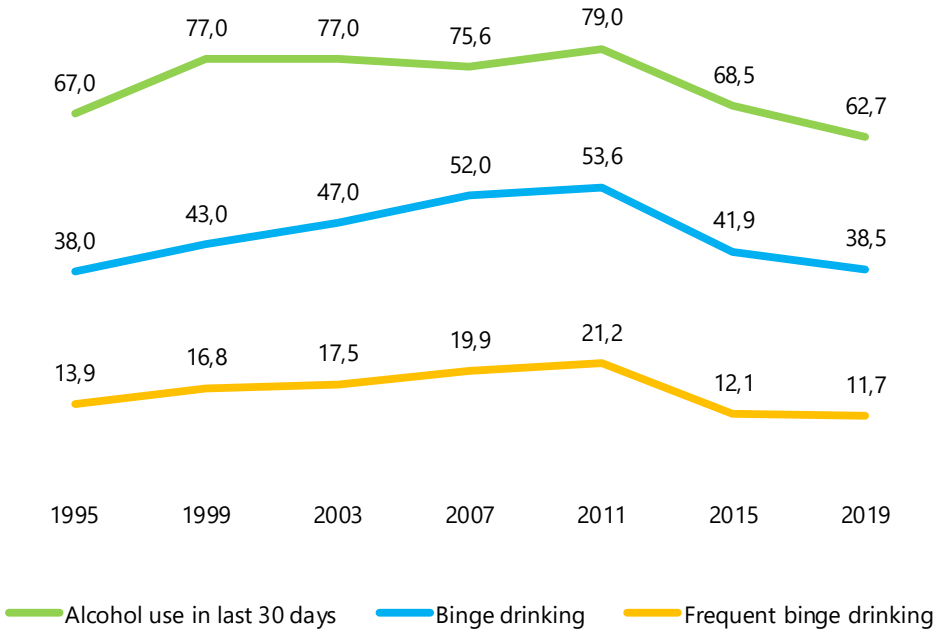
Alcohol advertising is very common in the Czech Republic and is a frequent part of television broadcasting. Sponsorships related to sports, entertainment and cultural events are also used for promotion.

7.2 Alcohol use among children and youth

Prevalence of both alcohol use and risky forms of alcohol consumption among children and adolescents have declined in recent years, but experience of the youth with alcohol remains on a high level [31, 48].

Over 40% of 13-year-olds have experienced drinking alcohol, and a quarter of 15-year-olds have been drunk at least twice in their lives. Among 16-year-olds, 95% already have used alcohol; almost 40% of 16-year-olds have engaged in 'binge drinking' (drank 5 or more glasses of alcohol on one occasion) in the last month[3] – Figure 7-1. The proportion of young people with experience with alcohol and drunkenness has been decreasing over the last 10 years.

Figure 7-1: Trends in alcohol consumption among 16-year-old students – ESPAD study 2015-2019, %



Source: Chomynová et al. [31]

The transition from primary to secondary school is an important milestone in terms of exposure to addictive substances.

The subjectively perceived availability of alcohol has been declining in recent years, but is still relatively high. 80% of 16-year-olds can easily or quite easily obtain beer, while 40% reported drinking alcohol in restaurants. Awareness of the risks of heavy alcohol consumption is increasing.

Children from socio-economically disadvantaged backgrounds, clients of low-threshold facilities for children and youth, children in institutional care or children of Roma origin report higher prevalence of alcohol use.

7.3 Alcohol use in the adult population

About 10% of people aged 15+ years drink alcohol daily [32, 33] – Figure 7-2. An estimated 11% of the adult population fulfils the diagnostic criteria for alcohol use disorder.

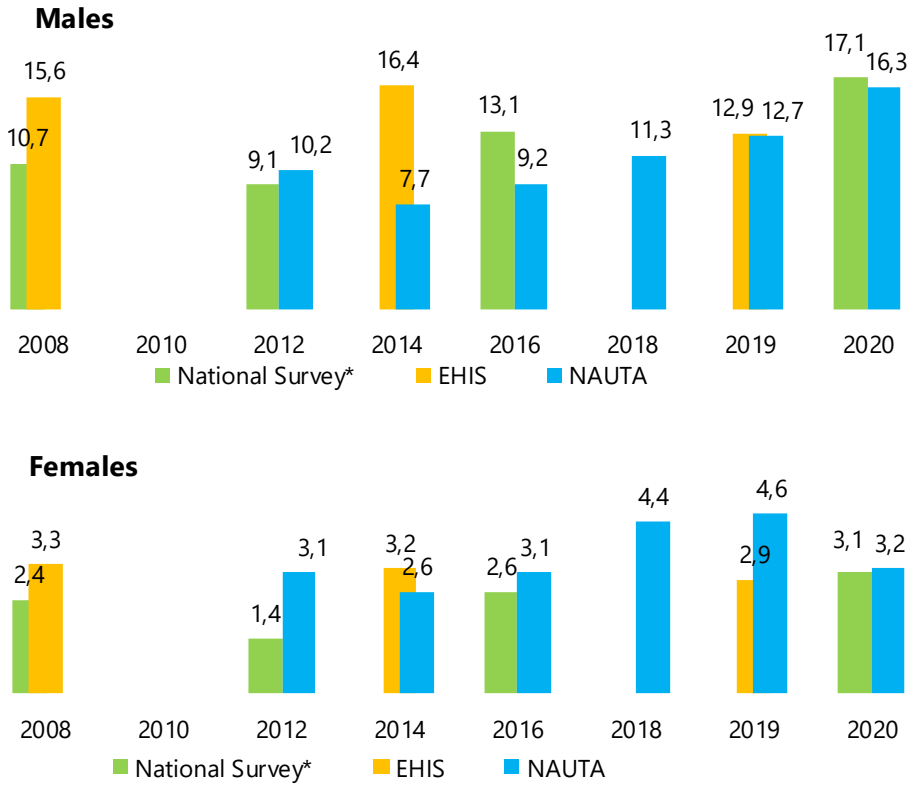
17-19% of the adult population are risky alcohol consumers, i.e. an estimated 1.5-1.7 million people in the Czech Republic, of whom almost 900 thousand (9-10% of the population) fall into the category of harmful alcohol consumption. The prevalence of harmful drinking is 2-3 times higher

[3] A standard glass – 0.5 l of beer, 2 dl of wine or 5 cl of 40% alcohol – contains 10-20 g of ethanol.

among men. Long-term trends show an increase in the prevalence of harmful alcohol use between 2012 and 2020.

A survey among doctors estimated 150-170 thousand people at high risk related to their alcohol use, which refers to drinkers of whom doctors were aware as having alcohol-related problems [22].

Figure 7-2: Daily or almost daily alcohol use in the adult population (aged 15+) by gender – comparison of surveys carried out in 2008-2020, % (National Survey on Substance Use, European Health Interview Survey, National Survey on Tobacco and Alcohol Use)



Note.: *The 2008 and 2012 National Survey results refer to the population aged 15-64.
Sources Mravčík et al. [49]

Two-thirds of women have consumed alcohol during pregnancy [50, 51], and 10-20% of pregnant women consume alcohol regularly.

The Czech society's attitudes towards alcohol are very tolerant. Regular alcohol consumption is considered acceptable by 90% of people, while only a quarter of Czechs would ban distillates' advertising and only 10% would ban advertisements on beer or wine.

7.4 The health impact of alcohol use

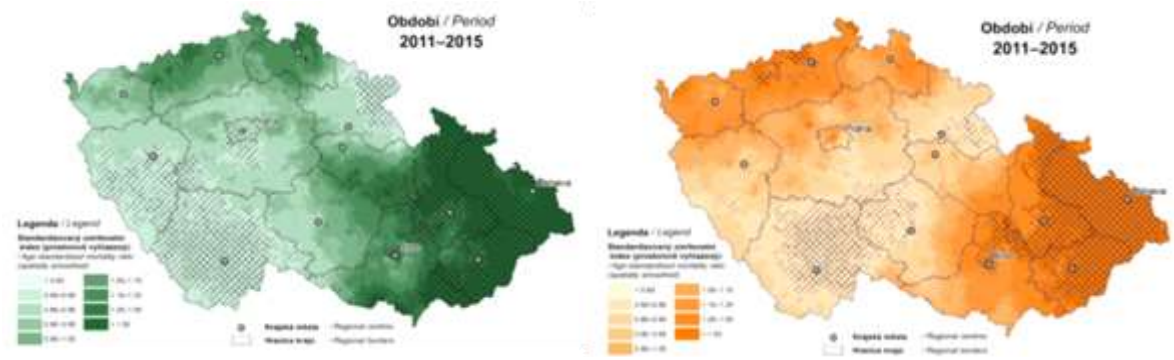
The overall health impacts of alcohol use are not systematically monitored in the Czech Republic.

The most recent estimate of total mortality attributable to alcohol in the Czech Republic was for 2010, when 6.5 thousand alcohol-related deaths were estimated, representing 6% of the total mortality in the Czech Republic (10% for men and 2% for women) [52].

Of the estimated 6-7 thousand alcohol-related deaths per year, alcohol can be identified as the main or sole cause of death in one third of the cases. Deaths from alcohol-related causes are on the rise, with an increase in cases of alcoholic liver disease, accidents and alcohol-related suicides [53].

Premature alcohol-related mortality is the highest in the regions of Central Moravia and also Silesia – Map 7-1.

Map 7-1: Alcohol-related premature mortality in the Czech Republic in ages 25-64, men and women, SMR



Source: Kážmér et al. [39]

On average, alcohol addicts die 24 years earlier compared to the general population, with almost 83% of those being in the economically active age group younger than 64 years [54]. The most common causes of death are so-called external causes (24%), mainly accidental injuries (13%) and suicide (6%), followed by liver diseases (18%), diseases of the circulatory system (15%) and malignant neoplasms (7%).

Annually, 13-14 thousand hospital admissions are reported for diseases entirely attributable to alcohol [23] – 8 thousand cases for alcohol dependence (about 60%), 4 thousand for alcoholic liver disease (30%) and 1 thousand for alcoholic pancreatitis. The ratio of men to women is about 2:1. Alcohol is the cause of 98% of substance-impaired injuries.

7.5 Social consequences and correlates of alcohol use

Alcohol is associated with domestic violence. It is estimated that it is associated with up to 2/3 of all cases of domestic violence in the Czech Republic [55]. Women are particularly affected by alcohol-induced violence. Binge drinking increases the risk of aggressive behaviour. In addition to physical violence, alcohol increases the likelihood of sexual violence as well as intense psychological violence [56].

Alcohol is involved in approximately 5% of road traffic accidents, and approximately 10% of cases of deaths in road traffic accidents are caused by alcohol. The likelihood of an accident increases with blood alcohol level – in 79% of all accidents caused by alcohol, the culprit had a blood alcohol level above 1‰, i.e. it was a criminal offence [57].

The estimated total social cost of alcohol consumption in the Czech Republic is CZK 56.6 billion (€ 2,141 million), of which the largest share of costs (51.2%) are indirect costs due to loss of productivity related to morbidity and premature mortality, as well as the cost of treatment of alcohol-related diseases (24.4%).

7.6 Alcohol-related crime

In 2020, nearly 900 misdemeanours and 200 criminal offences of serving alcohol to a minor were recorded [58].

Offences committed under the influence of alcohol accounted for 13% of all solved crimes [59]. Approximately 8.1 thousand offences of endangering under the influence of an addictive substance and drunkenness were recorded, of which 5.5 thousand were alcohol-related.

Almost 200 people, most often those convicted of disorderly conduct, have been placed in protective treatment in relation to alcohol.

Theft or other illegal conduct with the motive of obtaining resources for alcohol was committed by 11% of convicted prisoners [36].

Nearly 25,000 administrative offences related to alcohol (or other addictive substances) were recorded in 2020 [60].

7.7 Health warnings on the risks of alcohol consumption and brief interventions

Warnings on the risks and harms of alcohol on alcoholic beverage packaging are not mandatory in the Czech Republic. The ethanol content in percentage by volume must be indicated.

It is a legal obligation for all health professionals to carry out brief interventions in the field of substance use. However, for at-risk or heavy alcohol users, only half of physicians perform them [61]. The situation has not improved in recent years.

Prevention of alcohol consumption among children and young people is part of a broader framework of risk behaviour prevention coordinated by the Ministry of Education. In 2020, the implementation of prevention activities was negatively affected by the situation related to the COVID-19 pandemic.

7.8 Treatment of alcohol users

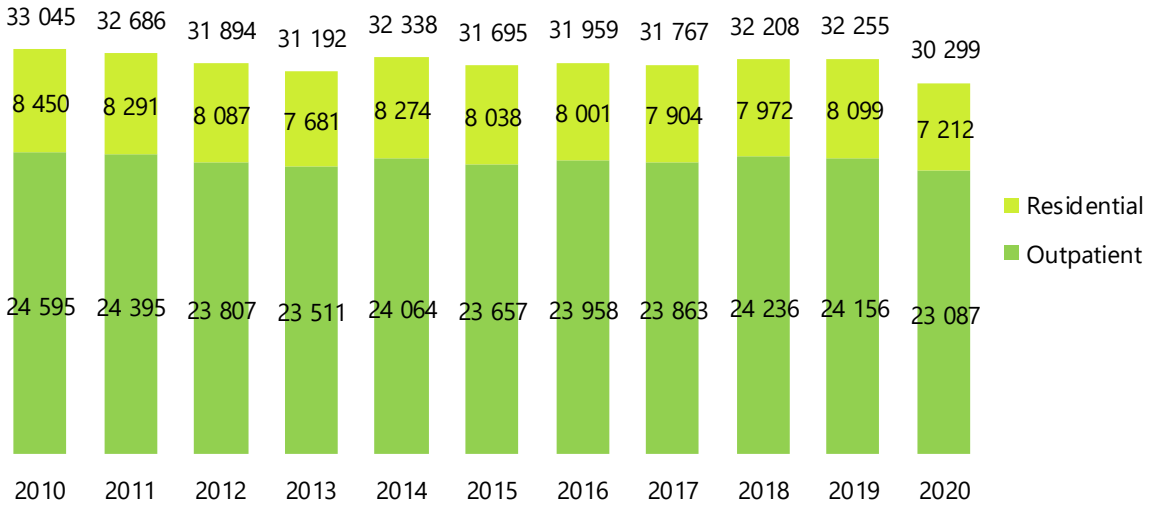
Treatment of addiction in the Czech Republic takes place in outpatient or residential settings, is abstinence-oriented, and is typically based on the so-called Skála model: residential treatment beginning with detoxification, with a structured programme of activities with elements of psychotherapy and physical activities, which may be supplemented by pharmacological support. A point system of behavioural assessment is used to work with client's motivation.

Alcohol addiction treatment is provided in addictology programmes that also provide services to people who have a problem with illicit drug use or gambling. Those treated for alcohol dependence are 2/3 male, with an average age of around 45 years.

There are approximately 250-300 addictology programmes of various types in the Czech Republic [18], of which 30-40 are residential programmes and 40 are aftercare programmes. Approximately 30 thousand alcohol users are in contact with them annually, of which 27 thousand are reported in psychiatric facilities (6 thousand in inpatient care). There are 19 therapeutic communities with an estimated capacity of 320 places, treating about 100 alcohol users a year.

Data from the NRPHS show that the number of alcohol users in outpatient and residential psychiatric care has remained stable over the long term (Figure 7-3), with a trend of increasing age of treated alcohol users in recent years.

Figure 7-3: Patients treated for alcohol use disorders (dg. F10) in outpatient and residential psychiatric care in 2010-2020



Source: Ústav zdravotnických informací a statistiky ČR [23]

In recent years, a private segment of services has been developing, particularly aiming at helping people with problem alcohol use, but these programmes are not part of the publicly funded service network. Treatment and counselling through the internet and new technologies are also being developed.

Several associations in the Czech Republic offer self-help support to alcohol users. The fellowship Alcoholics Anonymous (AA) is active in 45 cities, and there are currently 67 AA groups in the Czech Republic. Apart from AA, there are a few other self-help groups in the Czech Republic in Brno and České Budějovice.

In September 2021, there were 34 registered providers of addiction aftercare services, 25 of which offered sheltered housing with a capacity of 310 beds. Alcohol users make up about 60% of their clients.

7.9 Harm reduction services for alcohol users

Alcohol users are often clients of low-threshold harm reduction programmes primarily targeted at people using illicit drugs. In 2020, 38.8 thousand substance users were in contact with low-threshold programmes, including 3.3 thousand alcohol users (8.5%) [17].

Harm reduction interventions aimed at reducing or controlling alcohol consumption are not widespread in the Czech Republic in the framework of addressing problem alcohol use or dependence. Since 2013, Selincro (nalmefene) has been available in the Czech Republic to reduce alcohol consumption in people with problem drinking or alcohol dependence. However, its use in the Czech Republic is minimal and its high price is the barrier of its wider application.

An innovative harm reduction approach is represented by managed alcohol programmes, i.e. the administration of alcohol to alcohol dependent people under controlled conditions [62-64].

The harm reduction function in the field of alcohol is also provided by the sobering-up stations: they provide medical supervision and care to intoxicated persons, prevent damage to health in the state of intoxication and the threat to other persons, public order and property caused by the behaviour of intoxicated persons. In 2020, there were a total of 18 sobering-up stations in the Czech Republic, which provided services to 17.8 thousand people.

There are about 15 programmes providing services in nightlife settings in the Czech Republic, providing counselling and information interventions, harm reduction material or breath tests for alcohol. In 2020, they reached about 6.5 thousand people, including 2.3 thousand alcohol users.

In 2019-2020, Prague had a so-called Night Mayor appointed by the municipality to address problems related to nightlife, including problems related to alcohol use in public space and nightlife settings. In April 2020, the position of Night Mayor was abolished.

Chapter 8:
Problematic use of psychoactive medicines and its impact

8.1 The public health impact of the use of psychoactive medicines

The misuse or overuse of psychoactive medicines affects a relatively large proportion of the population and is the cause of health disorders and negative social impacts on users and their environment.

The overarching definition of misuse of psychoactive medicines [6] includes any use of the medicines that has shown a problem consumption. This includes, for example, the use of a medicine (with or without a prescription) out of line medical procedures or instructions, for recreational purposes or as part of self-medication, where the risks and problems associated with its use outweigh its benefits.

Specific forms of medicine abuse include using the medicine as a source (precursor) for the production of other drugs or administering the medicine to another person with the aim of involuntarily drugging them.

Two groups of people misusing psychoactive medicines can be distinguished: (1) persons suffering from health problems who lose control over their use of medicines, (2) persons addicted to other substances, including alcohol or illicit drugs, who use psychoactive medicines as a substitute for other drugs or to relieve withdrawal symptoms [65, 66].

The problematic consumption of psychoactive medicines includes inappropriate treatment (inappropriate dosage, inappropriate indication), off-label use (in combination with addictive substances, illegal acquisition) and use in high-risk situations (driving, sports) [65, 67].

Psychoactive medicines are often misused in the context of self-medication for sleep problems, anxiety, pain, etc., and people are often unaware of the addictive potential of the medicines they are taking.

The abuse is mainly related to medicines with sedative, hypnotic and anxiolytic effects (mainly benzodiazepines and Z-hypnotics) and opioids, but abuse also includes other medicines from the group of stimulants and antiepileptics (e.g. pregabalin).

A specific problem is the use of buprenorphine-based medicines obtained from the illicit market by high risk drug users/people who inject drugs. Pseudoephedrine-based medicines are used for the illicit production of methamphetamine.

8.2 Use of psychoactive medicines among children and youth

Monitoring of the prevalence of psychoactive medicines use is not conceptualised.

Misuse of medicines, i.e. use of sedatives without a doctor's recommendation, use of painkillers in order to get high or use of medicines in combination with alcohol, is reported by more than 14% of 16-year-olds, including 5% having misused medicines repeatedly. The experience is more common in girls. Compared to other European countries, prevalence of medicines use among Czech students is above average, especially in case of painkillers used in order to get high and use of medicines in combination with alcohol [31].

10% of 11-15-year-olds [68] have used psychoactive medicines without a reason in their lives. Similarly to other addictive substances, children from socio-economically disadvantaged backgrounds, clients of low-threshold facilities for children and youth, children in institutional care or children with Roma backgrounds report higher prevalence of use of psychoactive medicines.

8.3 Psychoactive medicine use in the adult population

Psychoactive medicines (both prescribed and obtained without doctor's prescription) were used in the last 12 months by 16% of adults aged 15+ years – Figure 8-1. Sedatives or hypnotics were used by 13% and opioid analgesics by 7% of adults. In the last 30 days, 11% of the population has used them. About 2% use sedatives or hypnotics and 0.5% of the population use opioid analgesics daily.

Approximately 90% of psychoactive medicine users had been using them for longer than 6 weeks, and 60% for more than 1 year. Approximately 12% of psychoactive medicine users obtained their psychoactive medicine by other means than doctor's prescription (from friends, over-the-counter in a pharmacy or via the internet).

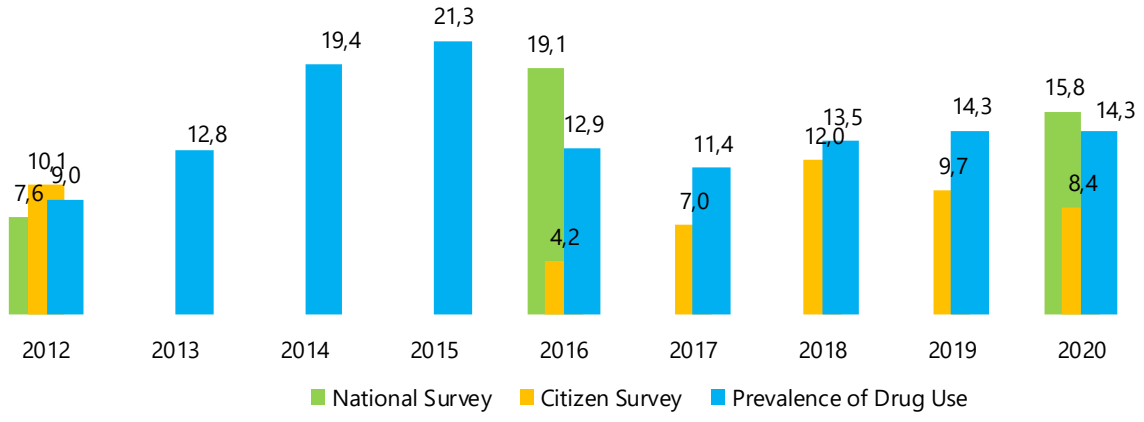
An estimated 15% of adults (20% of women and 10% of men) fall into the category of problem psychoactive medicine use (i.e. they have used medicines for more than 6 weeks, perceived they used medicines in higher than recommended doses in the last 12 months, or obtained medicines by other means than prescription), with 12% using sedatives and hypnotics and 6% taking opioid analgesics [32].

When extrapolated to the total population of the Czech Republic aged 15+ years, approximately 1.25-1.45 million people show signs of misuse of psychoactive medicines, of whom 900 thousand are women. Sedatives and hypnotics are misused by an estimated 1.1 million people, while opioid analgesics are misused by 550 thousand people.

An estimate of the number of people misusing sedatives and hypnotics based on data on their distribution to pharmacies in 2016 reached about 900 thousand people, of whom about 270 thousand were misusing alprazolam and about 190 thousand were misusing zolpidem [69].

The tolerance of the population towards the use of psychoactive medicines is high and their use is more acceptable than the use of other addictive substances, including tobacco. Only 10% of the population would ban over-the-counter medicine advertising.

Figure 8-1: Prevalence of misuse of psychoactive medicines (sedatives, hypnotics and opioid analgesics) in the general population aged 15+ years in the last 12 months – comparison of surveys between 2012-2020, % (National Survey on Substance Use, European Health Interview Survey, National Survey on Tobacco and Alcohol Use)



Note.: The 2012 National Survey refers to the population aged 15-64. The National Survey monitors the use of medicines regardless of whether they are prescribed by a doctor or taken without a prescription. The Prevalence of Drug Use in the Population and the Citizen Survey track the use medicines obtained without doctor's prescription.
Source: Mravčík et al. [70]

8.4 Impacts of the problematic use of psychoactive medicines

The health impacts of the use of psychoactive medicines are not systematically monitored in the Czech Republic.

Excessive use of psychoactive medicines leads to addiction, poor mental health and reduced quality of life. Addiction disrupts social, family and work functioning. The elderly are particularly at risk of developing addiction to psychoactive medicines and associated psychological and somatic complications [71]. In addition to loss of vitality, addiction can also result in impaired motor coordination and thus a higher risk of falls and injuries.

Some of the most common problems associated with addiction to sedatives and hypnotics include insomnia, anxiety, pain, weakness, fatigue and bad mood.

Around 40 cases of fatal overdoses of psychoactive medicines are recorded annually.[4]

There were over 30 cases of deaths under the influence of psychoactive medicines due to causes other than overdose, mainly due to illness, accidents and suicide, and almost 40 cases of deaths due to benzodiazepines and other psychoactive medicines.

Each year, 14-16 thousand cases of hospital admissions for substance-related injuries are reported, including 150-200 cases of injuries under the influence of psychoactive medicines. Thus, psychoactive medicines account for approximately 1% of all injuries in the Czech Republic.

Estimates of the total social costs associated with the problematic use of psychoactive medicines have not yet been made.

8.5 Prevention of psychoactive medicines misuse

Addiction prevention targeting children and young people, which includes the prevention of psychoactive medicine use and misuse, is part of a broader framework of prevention of risk behaviour. A specific prevention programme aimed at preventing the misuse of psychoactive medicines among children and young people is not known to have been implemented. The topic of psychoactive medicines is probably only marginally covered in school prevention.

Particularly important for the prevention of psychoactive medicines misuse are educational programmes for physicians, whose responsibility is the correct indication, dosage and duration of treatment, and who should educate patients about the risks of addiction [72]. Combined programmes involving various regulatory and educational interventions (letters or emails to doctors, automated computerised alerts, meetings, media campaigns, but also audits and prescribing profiles of doctors) have proven to be most effective in the long term.

Amendments to the Act on Addictive Substances in 2021 introduced an obligation on the prescribing physician to inform the patient that they are being prescribed a highly addictive medicine.

Brief interventions by general practitioners and other clinicians are an effective method of preventing the overuse of sedatives and hypnotics.

There are no systematic prevention programmes targeting physicians in the Czech Republic to control the consumption of psychoactive medicines among patients.

Healthcare professionals should be further educated on the use of non-pharmacological treatment options and medicines with lower addiction potential, consistent monitoring of patients' use of psychoactive medicines and provision of access to addiction treatment where appropriate is recommended.

Section on *Medicines addiction: what is it?* has been a part of the National Health Information Portal nzip.cz run by the Institute of Health Information and Statistics. The State Institute for Drug Control operates the olecich.cz (About medicines website) aiming to increase public awareness in the field of medicines.

[4] Fatal opioid analgesic overdoses are recorded within the broader category of fatal opioid overdoses.

In the past years, a number of media campaigns coordinated by the State Institute for Drug Control have been carried out focusing on road safety or on the topic of the proper handling of medicines in households.

8.6 Treatment of people misusing psychoactive medicines

Early identification of the problem and early intervention is important in case of psychoactive medicine misuse [71]. Short interventions aiming at gradually reducing the dose of psychoactive medicines are an effective method of treatment for indicated patients. The implementation of brief interventions is mandatory for all health professionals, but they are mainly targeted at addictive substances such as tobacco, alcohol or, in lesser extent, illegal drugs. Focus on the use of psychoactive medicines is not very frequent in brief interventions.

The treatment interventions applied include so-called safe detoxification, which in the case of sedatives and hypnotics consists of replacing the misused medicine with a long-acting benzodiazepine (diazepam) and gradually reducing its dose [73], this intervention is often combined with psychological support and counselling.

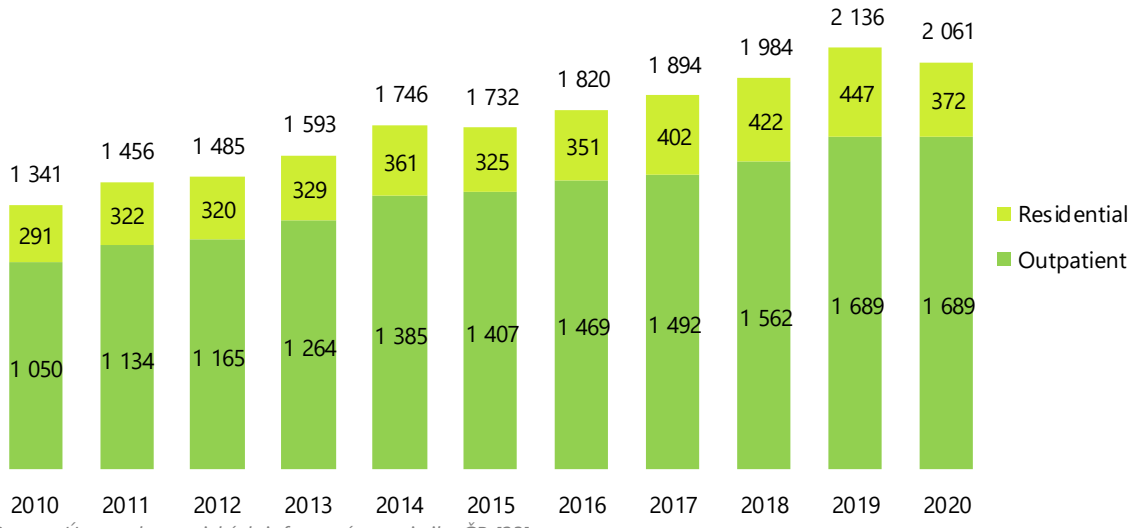
As with other opioids, substitution therapy can be used for opioid analgesics.

Treatment for addiction to psychoactive medicines is integrated into the addiction treatment system and is provided on both the outpatient and residential basis.

There are approximately 2.5 thousand users of sedatives and hypnotics in treatment for addiction related to psychoactive medicines each year, of which approximately 2 thousand are in outpatient programmes, and approximately 400 in residential treatment each year.

The number of people treated has been increasing since 2010 – Figure 8-2. Women make up approximately 2/3 of patients treated for addiction to sedatives and hypnotics.

Figure 8-2: Patients treated for psychoactive medicines use (use of sedatives or hypnotics, dg. F13) in outpatient and residential psychiatric care in 2010-2020



Source: Ústav zdravotnických informací a statistiky ČR [23]

The number of people treated for misuse of sedatives and hypnotics has gradually increased in recent years. The majority of cases (74%) are in the age group of 45+ years, and almost a quarter of patients (23%) are aged 70+ years.

The number of patients treated for dg. F13 in therapeutic communities is unknown, it is probably more likely to be an exceptional primary drug in this treatment modality. There is no known self-help group in the Czech Republic that deals specifically with addiction to psychoactive medicines.

Online counselling, web and mobile applications for people with addiction problems are increasing, their development has been further accelerated by the COVID-19 pandemic. The only online counselling service specialised in providing help to users of psychoactive medicines is the benzo.cz benzodiazepine counselling service run by SANANIM NGO.

The *National Quitline* 800 350 000 was contacted by nearly 70 people with a problem related to psychoactive medicine use in 2020.

9

Chapter 9:
Illicit drug use and its impact

9.1 Public health impact of illicit drug use

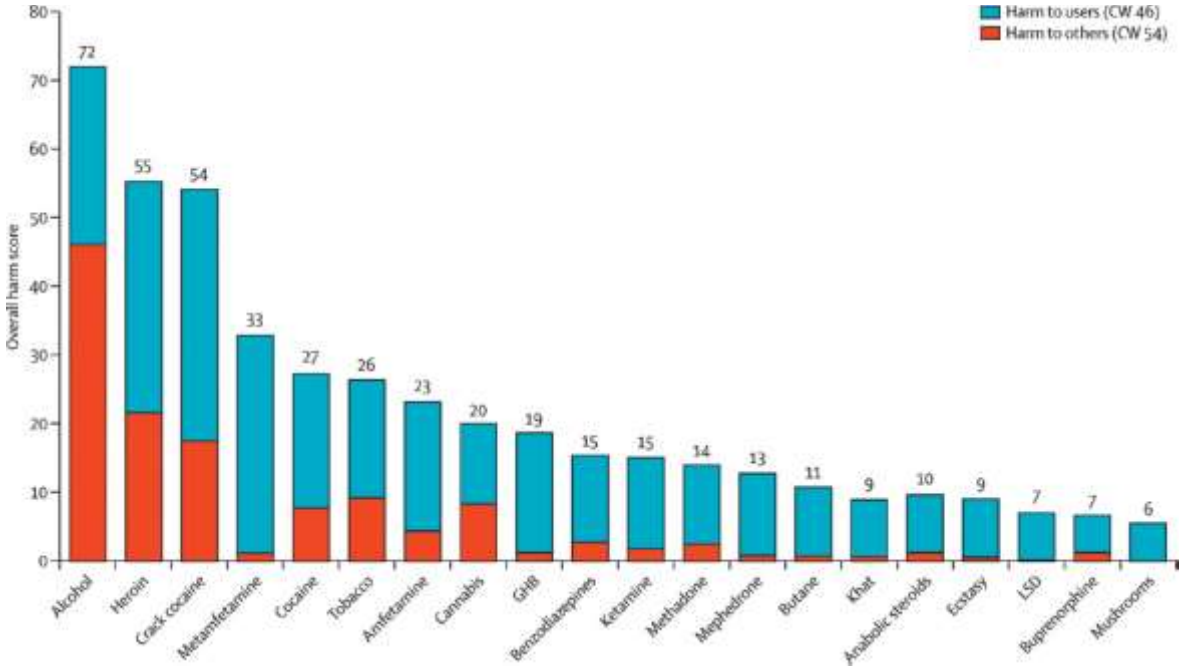
Globally, substance use is one of the most important risk factors contributing to overall mortality and morbidity, and is thus an important determinant of population health. In the World Health Organization's 2016 *Global Burden of Disease Study*, tobacco use ranks fourth and alcohol and illicit drugs together rank eighth out of the 84 preventable risk factors studied [74]. Illicit drugs account for 1% of all deaths worldwide [3].

Most of the harm can be attributed to the use of opioids and amphetamine-type drugs – opioid addiction accounted for 46% of the public health burden of illicit drug use in 2010 and amphetamine addiction accounted for 13% [75].

For illicit drug users, infectious diseases, diseases of the digestive system (especially hepatitis C and its clinical consequences) and external causes of morbidity and mortality, i.e. overdose poisoning, accidents and suicides, primarily contributed to overall morbidity and mortality [3, 74-76].

Different addictive substances show different levels of health and social harms associated with their use, both at the individual and population level [1]. Studies assessing the harm of individual substances show that heroin, cocaine, methamphetamine, but also legal alcohol and tobacco [77-79] (Figure 9-1), rank highest in terms of their risk potential. Thus, it appears that the legal status of substances and the degree of associated to legislative and other controls are not strongly correlated with the public health and societal risks of substances [1].

Figure 9-1: Ranking of drugs based on their overall harm caused to users and their environment



Source: Nutt et al. [77]

9.2 Illicit drug use among children and youth

Cannabis is the most commonly used illicit drug among both adolescents and adults in the Czech Republic, while the experiences with other drugs are much less frequent. The second most commonly reported illicit drug is ecstasy, followed by hallucinogenic mushrooms and LSD; use of methamphetamines (or amphetamines), cocaine or opioids is reported by a very low share of the population.

About 29% of 16-year-olds have tried an illicit drug at least once in their lives [31], 28% have tried cannabis, 4% ecstasy and LSD, 3% hallucinogenic mushrooms, 2% methamphetamine and/or cocaine, less than 1% heroin or other opiates. 5% have used inhalants in their lifetime.

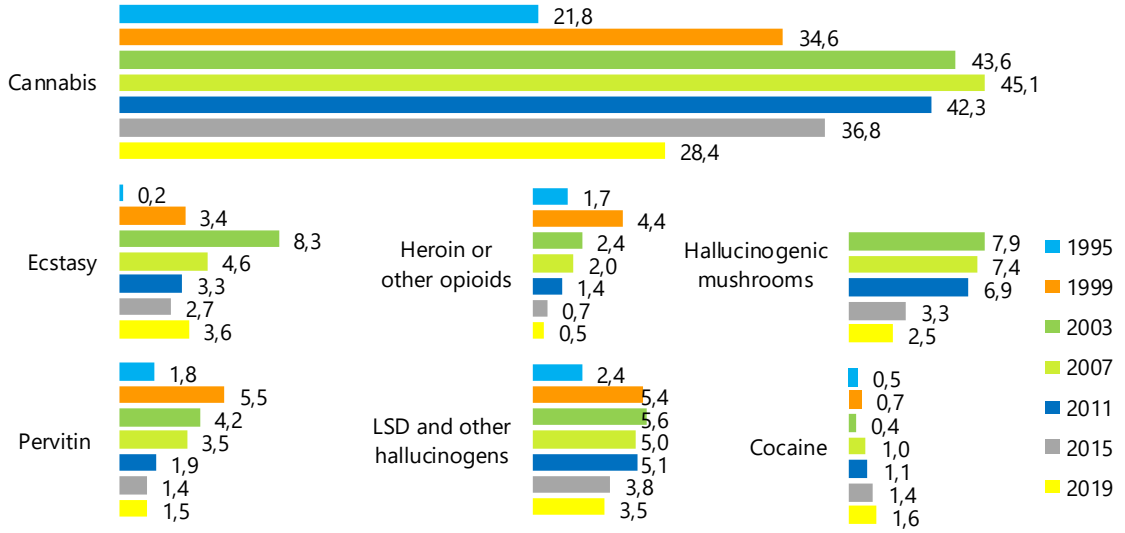
An estimated 7% of 16-year-olds are at risk of developing cannabis-related problems. When extrapolated to the population of adolescents aged 15-19 years, about 27-35 thousand people are estimated to be at risk of cannabis-related problems, of whom 6-10 thousand fall into the category of high risk.

A total of 17-20% of 15-year-old primary school pupils report having used cannabis substances in their lifetime, and approximately 8% of 15-year-olds [48] have used them in the last 30 days.

There has been a long-term increase in the average age of first substance use among adolescents. The average age of first experience with cannabis is 14.5 years.

The proportion of students who have used illicit drugs has been declining over the long term – Figure 9-2. The exceptions are cocaine and ecstasy. Compared to other European countries, Czech students report higher prevalence of use of ecstasy, methamphetamine, hallucinogens and especially cannabis, and below-average experience with heroin, cocaine and inhalants.

Figure 9-2: Trends in lifetime prevalence of illicit drug use among 16-year-olds – ESPAD study 1995-2019, %



Source: Chomynová et al. [31]

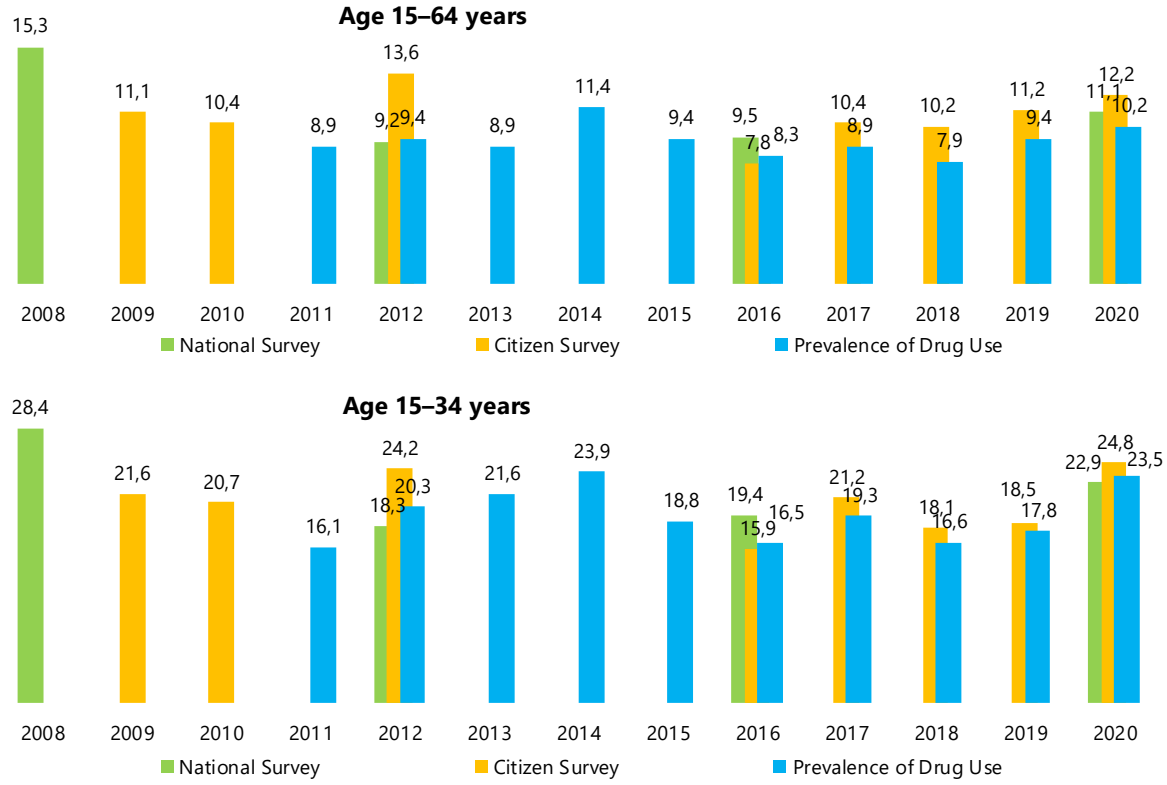
9.3 Illicit drug use in the adult population

Approximately a quarter of the population aged 15+ (23-29%) have tried cannabis, approximately 6% have used ecstasy in their lifetime, 5% have used hallucinogenic mushrooms, and 3% of people aged 15+ have used amphetamines (including methamphetamines) and cocaine [32].

About 8-10% of the population aged 15+ years have used cannabis in the last 12 months and 4-5% in the last 30 days. The rate of illicit drug use is approximately 2-3 times higher among young adults (aged 15-34) and among men.

The rates of illicit drug use in the general population aged 15-64 and among young adults aged 15-34 years have been stable over the long term – Figure 9-3. However, the prevalence of cannabis and cocaine use has been slightly increasing in recent years.

Figure 9-3: Prevalence of cannabis use in the general population aged 15-64 years and among young adults (15-34 years) in the last 12 months – comparison of studies carried out between 2008-2020, % (National Survey on Substance Use, Citizen Survey, Prevalence of Drug Use in the Czech Population)

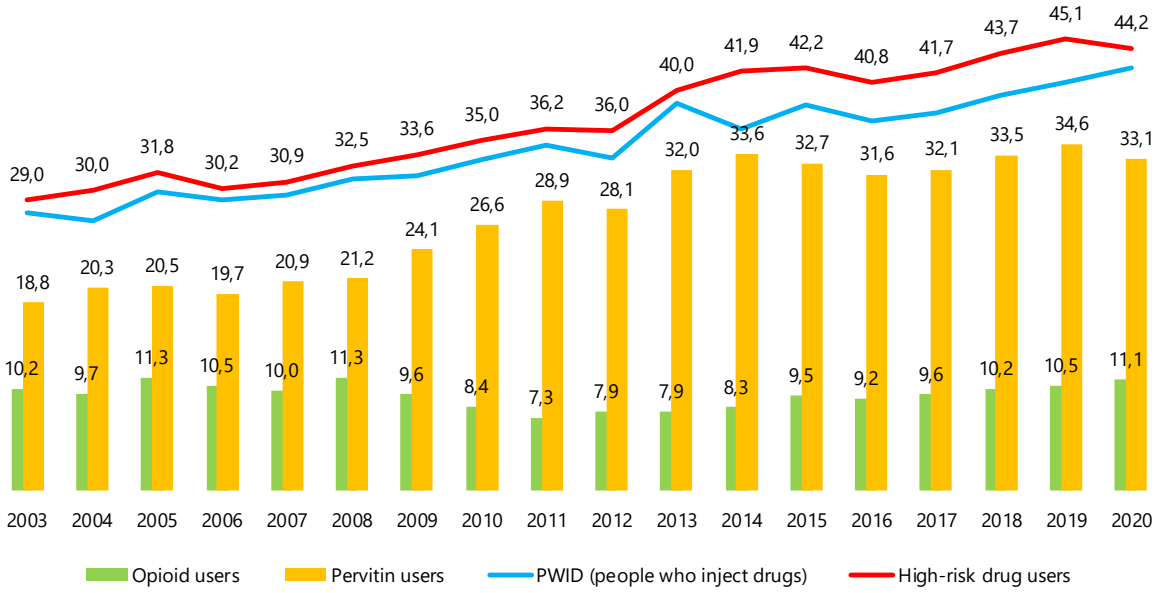


Note.: Long-term trends in cannabis substance use rates are not available for the population aged 15+ years.
Source: Mravčík et al. [80]

It is estimated that over 44 thousand people in the Czech Republic are high-risk methamphetamine or opioids users, of which 42 thousand are people who inject drugs. A total of 33 thousand are high-risk methamphetamine users and 11 thousand use opioids, especially buprenorphine (6 thousand) and heroin (3 thousand). Relatively, the highest number of high-risk users of methamphetamine or opioids is in Prague and the Ústí nad Labem region.

The number of people who use drugs (PWUD) decreased slightly in 2020 due to a decrease of 1.5 thousand methamphetamine users, while the number of high-risk users of opioids (especially buprenorphine) increased slightly. In the long term, there is an increase in the number of PWUDs – Figure 9-4.

Figure 9-4: Mean estimates of problem methamphetamine and opioid users based on multiplication method using data from low-threshold programmes in 2003-2020



Source: Národní monitorovací středisko pro drogy a závislosti [81]

An estimated 400 thousand people fall into the category of risks related to cannabis use [32]. Estimated 400-900 thousand people in the Czech Republic used cannabis for self-medication in the last 12 months, of which 150-250 thousand used cannabis exclusively for self-medication, without using it recreationally. The use of cannabis for self-medication increases with age, with the highest rates in the age group 55+ years.

CBD cannabis products (predominantly containing non-psychoactive cannabidiol) have been used by 200-800 thousand people in their lifetime, half of them in the last 12 months.

Attitudes towards illicit drug use have been stable over the long term, with a slight increase in the acceptability of cannabis and other illicit drug use among adults.

9.4 The health impact of illicit drug use

The number of newly reported cases of HIV among people who inject drugs has been low for a long time, with 14 cases in 2020, 5 cases of hepatitis type B reported in 2020 (a number that has been declining since 2001 due to the introduction of vaccination), and approximately 420 cases of hepatitis C (in comparison to 500-650 cases per year in recent years).

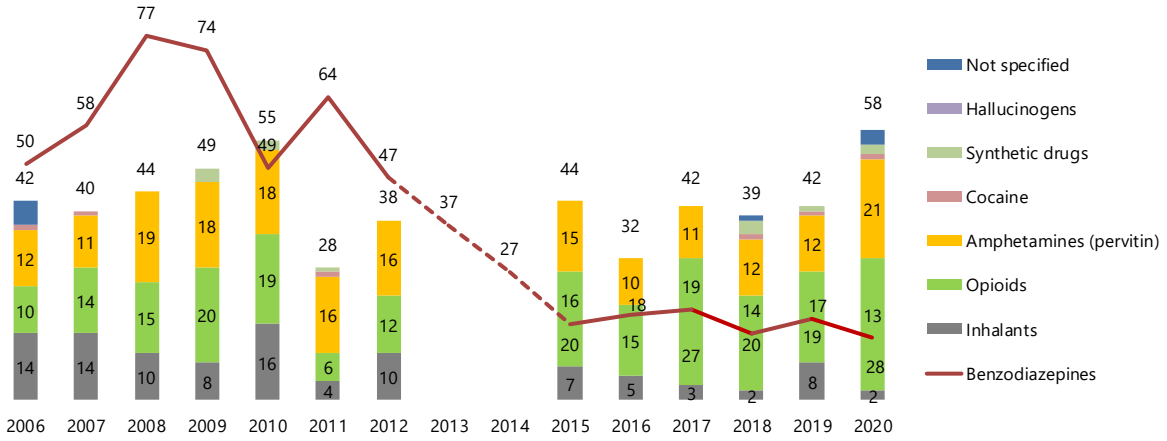
The prevalence of HIV among injecting drug users has been very low for a long time, below 1%. The seroprevalence of viral hepatitis C in clients of low-threshold programmes is around 37%.

Of the high-risk users of methamphetamine or opioids who are in contact with low-threshold programmes, more than 90% inject drugs. Needle and syringe sharing rates are decreasing, with over 20% sharing needles and syringes and 40% sharing paraphernalia in the last 30 days.

Fewer than 1% of high-risk users of methamphetamine or opioids die each year, with the death rate for methamphetamine users being estimated to be 6 times higher and for heroin users up to 12 times higher than for the general population of the same age. Approximately one third of them die as a result of an accident, and suicides are also common (one third of risk users of methamphetamine), which include deaths by overdose.

In 2020, 58 fatal overdoses of illicit drugs and inhalants were identified in the Special Mortality Register, most notably opioids (28) and methamphetamine (20) – Figure 9-5 [82].

Figure 9-5: Fatal overdoses of benzodiazepines, illicit drugs and inhalants in the Special Mortality Register between 2006 and 2020



Note.: * Data for 2013 and 2014 are not available. In 2015, the existing information system of the Special Mortality Register was changed to the National Register of Autopsies and Toxicological Examinations Performed in Forensic Medicine Departments.

Source: Ústav zdravotnických informací a statistiky ČR [82]

In addition, 150 deaths under the influence of illicit drugs and psychoactive medicines were identified from causes other than overdose, most of them similarly, as in the past, due to illness, accidents and suicide. In terms of illegal drugs, the highest number of cases was related to methamphetamine (44), followed by opioids (13) and THC (12). In the long term, the highest number of indirect deaths is associated with methamphetamine and cannabis substances.

9.5 Social correlates and context of drug use

For people who use of drugs, often an accumulation of negative social and economic factors takes place – in particular housing problems, financial problems (often a debt trap), unemployment or unstable and informal employment, and damage to family relationships.

Unstable housing and debts of high-risk users of drugs make recovery impossible, are a significant barrier to social and economic reintegration and often present an unsolvable problem. The social and economic situation of the RUDs has worsened as a result of the measures related to the COVID-19 epidemic.

Over 30% of clients of addictology services had regular employment, while over 40% were unemployed.

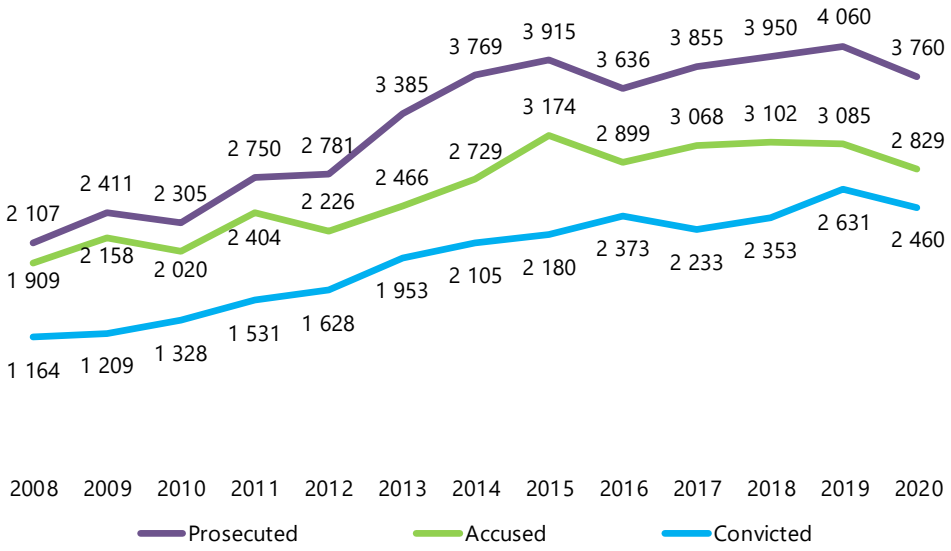
Among high-risk users of methamphetamine or opioids in contact with low-threshold programmes, nearly 70% had unstable housing and over 50% had unstable or illegal income. Over 20% of them do not have a valid ID card and 30% of them do not have a health insurance card. Over 80% are in debt, more than 70% are not aware of their debt.

The most recent estimate of the social costs related to illicit drug use is from 2007 [83], amounting to almost CZK 7 billion (€ 265 million); three quarters were direct law enforcement expenditures. Of the total estimated societal cost of drugs (including licit alcohol and tobacco) in the amount of CZK 56 billion (€ 2,128 million) costs related to illegal drugs accounted for over 10%.

9.6 Crime related to illicit drugs

In 2020, 4.2 thousand primary drug law offences (DLOs) were registered and 2.5 thousand people were convicted. Conditionally suspended imprisonment was the most common main sanction imposed (59% of sanctions). The number of people prosecuted, accused and convicted for DLO has been increasing for a long time – Figure 9-6.

Figure 9-6: Numbers of people prosecuted, accused and convicted for primary drug offences in 2008-2020



Source: Mravčík et al. [84], Policejní prezidium ČR [59], Ministerstvo spravedlnosti ČR [85], Ministerstvo spravedlnosti ČR [86]

Approximately 80% of criminal proceedings are for the illicit production and other handling with narcotic drugs and psychotropic substances, 20% for the offence of cultivation or possession of drugs for own use.

Over the past 10 years, methamphetamine-related offences account for an average of 49% and cannabis-related offences account for 42% of all primary drug offences.

Altogether 4.8 thousand crimes were committed under the influence of illicit drugs, which is 6% of all crimes and 31% of all crimes committed under the influence of addictive substances. The most reported crimes were the offences of endangerment under the influence of addictive substances or drunkenness under Sections 274 and 360 (2.6 thousand cases).

An estimated 19% of economically motivated crimes (31.4 thousand) were committed by drug users.

Theft or other crime or misdemeanour offences committed in order to obtain funds for illegal drugs have been ever committed by 30% of convicted prisoners.

9.7 Prevention of illicit drug use

Addiction prevention aimed at children and youth, which includes the prevention of illicit drug use, is part of a broader risk behaviour prevention framework. Illegal drugs are not a priority area for prevention programmes in schools, as these programmes are most often focused on bullying and aggression, criminal behaviour, cyberbullying and truancy.

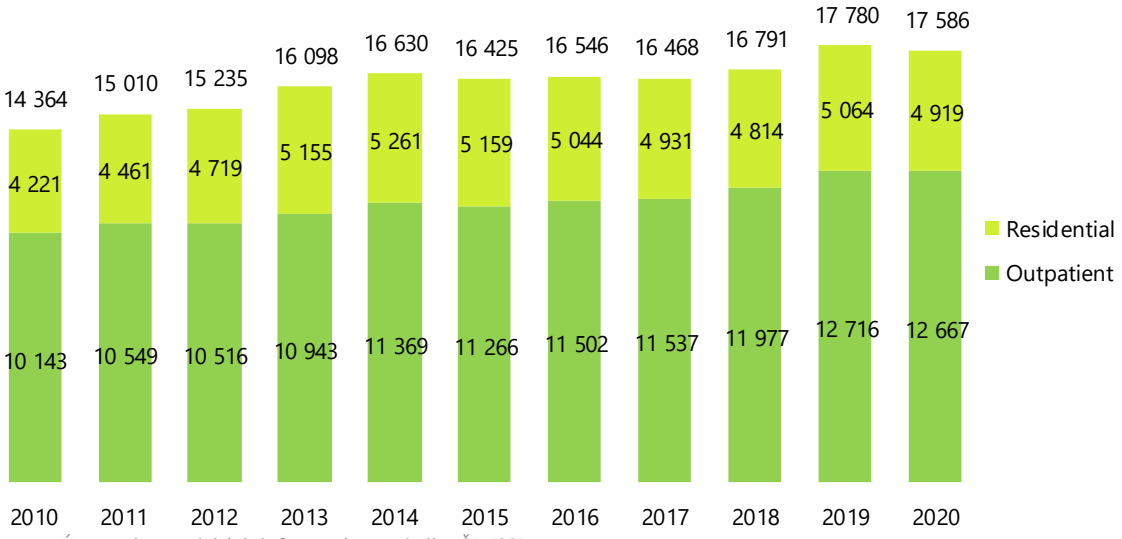
9.8 Treatment

Data from the NRPHS show that the number of illicit drug users in outpatient and residential psychiatric care has been increasing slightly over the long term – Figure 9-7. The age of treated illicit drug users is gradually increasing.

The highest number of people who use illicit drugs are in contact with risk minimisation services (39 thousand), with methamphetamine (65%) and opioid (26%) users making up the majority, and cannabis users making up 4% of the clients. The programmes estimated an additional 11 thousand

people in mediated contact. For more data on those treated in each service segment, see the chapter Addictology services (p. 33).

Figure 9-7: Patients treated for illicit drug use in outpatient and residential psychiatric care in 2010-2020



Source: Ústav zdravotnických informací a statistiky ČR [23]

10

Chapter 10:
Gambling and its impact

10.1 Gambling and its risk potential

Gambling provides a thrill and excitement that is a source of fun, but is also a cause of repetitive urges and an underlying behavioural conditioning that, in conjunction with other biological and psychological factors (such as gambling errors or loss catch-up), can lead to the development of gambling habits and loss of control over the behaviour [87].

A loss of control of the gambling behaviour is referred to as problem/pathological gambling. Characteristic features of problem gambling include high intensity of gambling, episodic nature of gambling, and high amounts of money invested in the game (relative to the economic situation of the player), with consequent negative effects on the players and their surroundings [88-92]. Problem gambling is also referred to as a gambling disorder or disordered gambling.

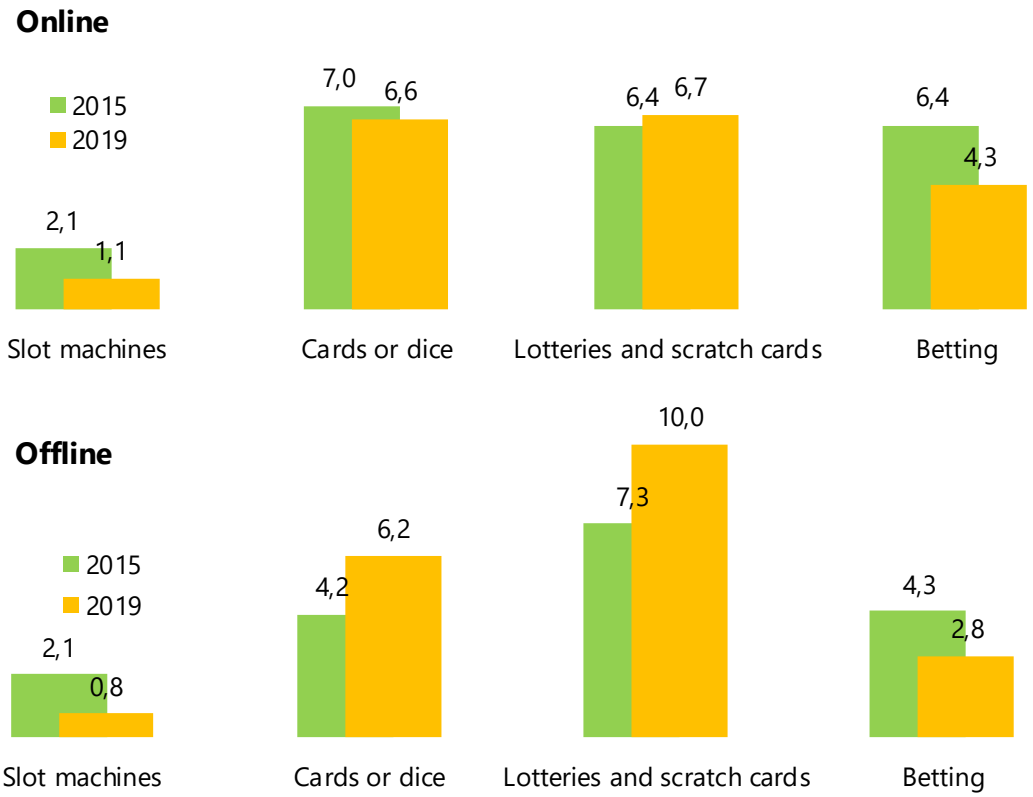
A large proportion of problem gamblers in many European countries play technical games (especially slot machines) [93]. In recent years, the internet and online gambling has become increasingly important, as the internet (and new technologies such as smartphones) offer virtually unlimited access to gambling and a wide range of online games [94, 95]. It is online gambling that is among the riskiest form of gambling in terms of developing problem gambling, as factors such as greater convenience, 24/7 availability, less interpersonal contact, the possibility of playing under the influence of addictive substances, cashless transactions and the possibility of playing multiple games simultaneously increase the risk of losing control of gambling [95-97]. Young males are particularly at risk of online gaming, as they seek an anonymous environment and are more prone to high losses due to losing track of time while playing [97, 98].

10.2 Gambling among children and youth

In 2019, a total of 11% of 16-year-olds reported gambling in the last 12 months [31]. Less than 1% reported playing slot machines (technical games), a total of 3% reported betting and 10% reported lotteries – Figure 10-1. It turns out that most students do not consider cards and dice games or lotteries as gambling.

The proportion of 16-year-olds at risk of developing gambling-related problems using the Lie/bet scale was estimated at 2-3%, with boys being 4 times more likely to develop gambling problems than girls. The prevalence of gambling and the incidence of gambling-related problems in the population of 16-year-olds has remained stable over the long term, but the proportion of those who report regular gambling for money is decreasing.

Figure 10-1: Prevalence of online and offline gambling among 16-year-olds – ESPAD study 2015-2019, %

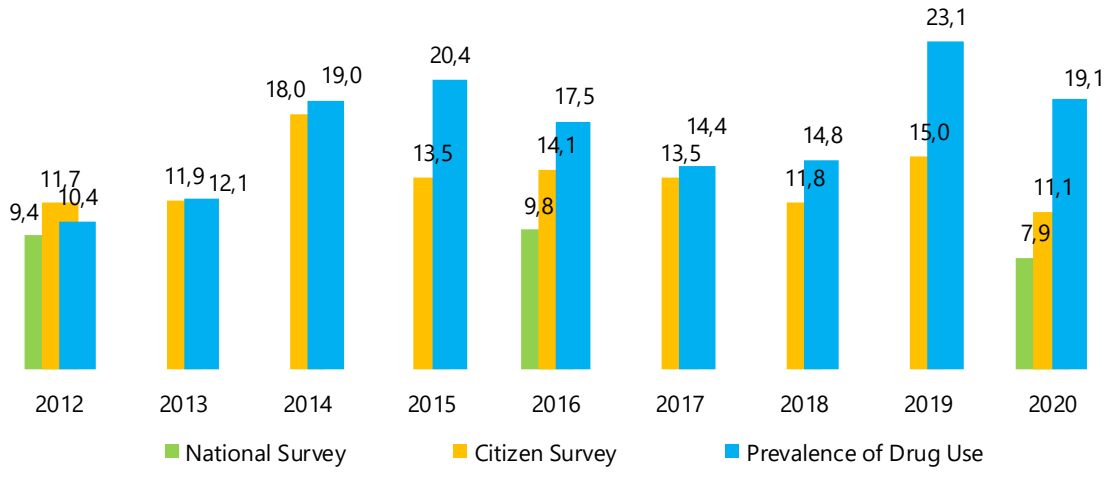


Source: Chomynová et al. [31]

10.3 Gambling in the adult population

Between 35-50% of adults reported gambling in the last 12 months, with most people playing the lotteries [32]. After the exclusion of lotteries, 8-19% of the adult population reported gambling – Figure 10-2. In the long term, there is a slight increase in the level of gambling in the adult population, both for lotteries and for other games (technical games, casino games and betting). The proportion of people who have played these games is significantly higher in the 15-34 age group, and the proportion of men is several times higher than the proportion of women.

Figure 10-2: Prevalence of gambling (excluding lotteries) in the population aged 15+ years in the last 12 months – comparison of studies carried out between 2012-2020, % (National Survey on Substance Use, Citizen Survey, Prevalence of Drug Use in the Czech Population)



Source: Mravčík et al. [99]

In addition to lotteries, it is estimated that most people engaged in odds betting (5-15% in gambling venues and 3-17% online), technical games in gambling venues (3-6%) and casino games (1-3% of the population) in the last 12 months.

The number of people at risk of developing gambling-related problems has long been estimated at 150-250 thousand using the Lie/bet scale and 400-800 thousand using the PGSI scale. According to both scales, 80-100 thousand people fall into the high-risk category in the long term.

The highest proportion of players at risk is among players of technical games and online betting. Of those who have played technical games in the last 12 months, 20-35% are at high risk. Of those who have played online betting or other online games in the last 12 months, 10-20% are at high risk.

10.4 Health and social impacts of gambling

A study among players in treatment in 2019 confirmed a high prevalence of psychiatric comorbidity. Over 60% of the players had an anxiety-depressive disorder in the last 30 days before treatment, with a further 20% showing an increased risk of this disorder [100].

Suicidal thoughts were reported by 49% of players at some point in their lives and 20% reported a suicide attempt, half of them repeatedly. There is a higher prevalence of substance use among players suffering from a gambling disorder.

The average monthly expenditure on gaming in the last year before the start of treatment was CZK 50 thousand, and the average monthly balance minus (-) CZK 43 thousand. An overall negative financial balance was reported by 91% of players, 88% of respondents were in debt, and the average debt was approximately CZK 800 thousand. Apart from legal work, loans were the main source of income, especially non-bank loans (11%).

10.5 Treatment and services for gamblers

In 2020, two thirds of people who had gambled in the last 12 months were aware of the risks associated with gambling and treatment options for problem gambling, 10% reported the possibility of self-restraining measures, in the case of online gamblers nearly 30% [101].

The main reasons for seeking professional help are financial and relationship problems, but also mental health and employment problems.

Services for problem gamblers and their families in the Czech Republic are provided in outpatient addiction programmes, psychiatric outpatient clinics and residential programmes. Online counselling and treatment interventions are being developed.

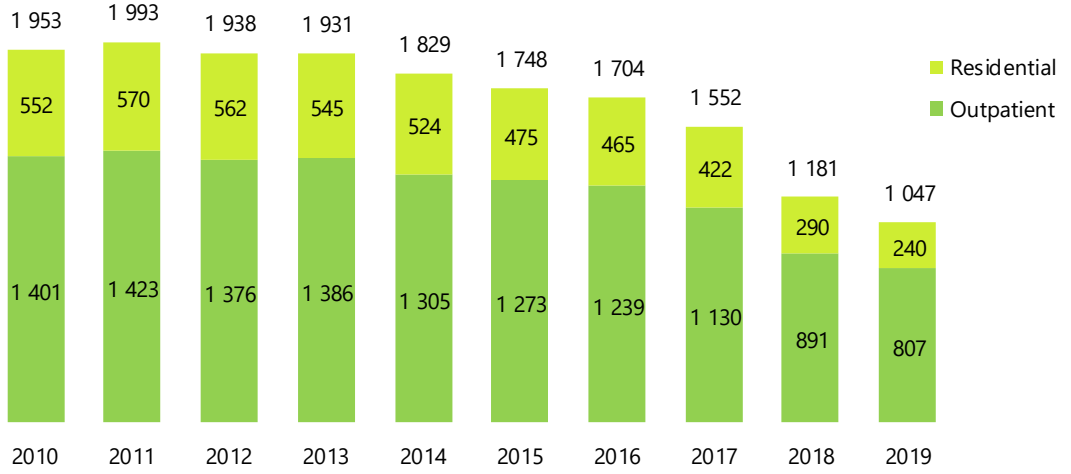
In recent years, support for specialised services for gamblers has been growing, especially thanks to the financial support of the Office of the Government / Government Council for Drug Policy Coordination. The aim of this support is, among others, to create a core network of specialised programmes for problem gamblers in all regional cities.

The 2020 *Census of Addictology Services* showed that for 156 of the 292 services that participated in the study, one of the main target groups are people at risk of problem gambling [102]. These are mainly social services (67%). They offer mostly outpatient and contact-counselling services to players.

Approximately 2-3 thousand people a year are in contact with services related to gambling, approximately five times more men than women, including approximately 1 thousand people in psychiatric care facilities (outpatient and residential) – Figure 10-3. The average age of gamblers in treatment was approximately 35 years. Almost 60% of those treated reported slot machines (technical games) as their main problem game, compared to over 80% in 2013. There is a growing

proportion of people who have a particular problem with odds betting, in some services they already prevail.

Figure 10-3: Patients treated for gambling-related disorder in outpatient and psychiatric care facilities in 2010-2019



Source: Ústav zdravotnických informací a statistiky ČR [23]

The provision of services was affected by the COVID-19 pandemic – there was a decrease in the number of face-to-face interventions, but a significant year-on-year increase in telephone and internet counselling.

Programmes for people at risk of gambling problems were available in 33 cities in the Czech Republic. Outpatient clinics accounted for the highest number of gambling programmes, with 12 specialized gambling clinics. In 2020, there were 10 regional gambling centres in the Czech Republic. Nine projects focused on the recovery and aftercare stabilisation of clients.

10.6 Crimes related to gambling

In 2020, the Customs Administration detected almost 500 violations of the Gambling Act and seized almost 800 illegally operated technical games. It imposed fines totalling almost CZK 40 million for breaches of the law in the operation of land-based gambling.

At the end of April 2021, almost 220 websites offering illegal gambling were listed on the list of blocked websites maintained by the Ministry of Finance, the most frequent being variants of 1xbet.com website (100 cases). Fines totalling almost CZK 200 million (€ 7.6 million) were imposed for breaking the law in the operation of online gambling in 2020.

In 2020, almost 90 criminal offences of unauthorised gambling were recorded. According to the prosecutor's office, more than 110 people were prosecuted, and prosecution was conditionally suspended for almost 80 of them. Nearly 30 people were charged and over 20 were convicted.

When it comes to secondary crime, half of pathological gamblers have ever committed theft, and a third have committed fraud or embezzlement, according to the results of a 2019 study of gamblers in treatment. Almost 20% of people in prison reported committing theft in order to obtain money for gambling, the most since 2014.

11

Chapter 11: Recommendations

On the basis of comprehensive monitoring of the current situation and current developments in the field of substance use and gambling and the identification of strengths and weaknesses in individual areas, recommendations are formulated for the future implementation of policy in the field of addiction, so that this policy reflects both the current situation in the Czech Republic and international recommendations, strategies and best practice in this area abroad.

While some of the recommendations can be implemented in a relatively short timeframe, the implementation of others is a long-term issue that will require consensus among addiction policy makers and adequate human and financial resources to implement them. Many of the recommendations are already reflected in the current *National Strategy for the Prevention and Reduction of Harm Associated with Addictive Behaviour 2019-2027* and its action plans, which detail specific steps to achieve its objectives, identify the actors responsible for implementing individual activities and the deadlines for their implementation, as well as quantify the financial resources necessary for their implementation. The recommendations in this chapter, formulated on the basis of the partial reports on the situation of tobacco, alcohol, psychoactive medicines, illegal drugs and gambling, are not intended to replace action plans, but are more general in nature and should complement them in areas that have not yet received priority attention.

Substance use is one of the most important risk factors and determinants of population health in developed countries and the proposed measures, though some of them unpopular, can contribute to reducing the risks associated with substance use or addictive behaviour in general.

11.1 National policy and strategy

Recommendations for the national addiction policy:

- strengthen tobacco and alcohol policy coordination mechanisms, especially in view of the current division of responsibilities between ministries,
- prioritise addiction policy measures and allocate public resources to their implementation according to their potential to contribute to reducing health and social harm,
- focus on preventing harmful exposure to addictive products and reduce their negative health and social impacts, in all policy areas (prevention, demand regulation, supply regulation),
- ensure more effective spending in individual areas – prevention, treatment, risk reduction, law enforcement,
- set up a centralised source of funding to enable stability of addictology services and at the same time to allow a flexible response to current developments,
- introduce systemic changes, including legislative ones, in the provision of addiction services with the aim of achieving their optimal quality, availability and coverage, and strengthen the coordination of their provision at the state, regional and local level, also using the outcomes of the DAS project,
- promote the destigmatisation of people with addiction problems.

11.2 Availability, markets and supply of psychoactive substances and gambling

Given the complexity of the issue and the different regulatory frameworks for individual addictive substances, this section formulates area-specific measures.

Recommendations for the field of tobacco, nicotine and related products:

- reach a common consensus on the regulation of advertising and sponsorship of tobacco, nicotine and related products (including restrictions on point-of-sale advertising and promotion on the internet and social media),
- introduce uniform packaging for smoking tobacco products, which will reduce the attractiveness of these products,
- maintain or appropriately adjust the tax (price) advantage of alternative tobacco and nicotine products over smoking tobacco products to economically motivate smokers to switch to less risky smoking alternatives,
- increase the affordability of pharmacotherapy for tobacco smokers through reimbursement from the public health insurance system, including reimbursement for hospitalised patients,
- inform consumers about the lower risk of alternative tobacco and nicotine products compared to smoking, and include information about the lower risk of alternative products compared to smoking in health warnings,
- unify and clarify terminology in the field of tobacco, nicotine and related products.

Recommendations for the field of alcohol:

- adjust the excise taxation and pricing mechanism for alcoholic beverages in the Czech Republic to take into account the risk potential of alcoholic beverages according to the ethanol content in the beverage (e.g. introduce a non-zero tax rate for still wine), consider introducing a minimum price per unit of alcohol and link the rate of taxation to the rate of inflation,
- tighten the existing regulation of alcohol advertising, marketing and sponsorship (including restrictions on advertising and promotion on social media), consider banning the use of alcohol to promote the sale of other products,
- set up a regulation of online marketing and influencing on social networks,
- implement current alcohol regulation more rigorously, e.g. strictly controlling the age of purchasers during sales,
- regulate the time and spatial availability of alcohol – introduce restrictions on night-time sales of alcohol in shops, consider banning alcohol discount promotions, reducing the number of outlets and introducing in-store measures,
- introduce mandatory health warnings on the risks and harms of alcohol (similar to tobacco products) on the packaging of alcoholic beverages,
- maintain current legislation on zero tolerance of blood alcohol content for road users (except pedestrians).

Recommendations for the field of psychoactive medicines:

- increase public health literacy – conduct public information campaigns on the risks of overuse of psychoactive medicines and alternatives to their use; inform about the risks of online shopping,
- focus more on the use of psychoactive medicines in school-based primary prevention,
- introduce warnings on the packaging of psychoactive medicines, especially those with a high risk of developing addiction (opioids, central stimulants, anxiolytics, sedatives, hypnotics), consider the possibility of introducing information pictograms on the packaging of psychoactive medicines,
- achieve appropriate prescribing (e.g. smaller pack sizes) and increase the number of adverse reaction reports by introducing regular education for physicians,
- pay more attention to the use of psychoactive medicines in the implementation of brief interventions by health professionals in primary healthcare,
- in cooperation with professional societies, advocate for the inclusion of the topic of addiction to psychoactive medicines in the basic pre-graduate certification training of all physicians,
- introduce regular training and increase the competence of pharmacists in dispensing psychoactive medicines,
- introduce effective controls on the prescription of psychoactive medicines, using existing legislative and technological tools,
- effectively combat the illegal supply of psychoactive medicines, especially on the internet.

Recommendations for the field of illicit drugs:

- discuss the decriminalisation and depenalisation or, where appropriate, legal regulation of socially low-risk forms of handling or disposal of controlled substances in situations that may also be beneficial from the public health perspective and may also represent a reduced burden on the criminal justice system and a reduction in social costs,
- actively work towards reducing the negative health, social and societal impacts of the system of the control of narcotic drugs and psychotropic substances through evidence-based practices,
- on the basis of evidence, consider legislative changes and promote research into the use of psychoactive substances for therapeutic purposes,
- strengthen the possibility of imposing alternative sentences for perpetrators of less serious drug trafficking offences,
- develop a uniform minimum programme for the implementation of protective treatment for alcohol, drug addiction and pathological gambling in an institutional form in order to unify the basic length, content and quality of treatment,
- draft an amendment to Act No. 167/1998 Coll., on Addictive Substances, as regards the legal aspects for the inclusion of new addictive substances in the lists of addictive substances set out in Government Regulation No. 463/2013 Coll., on lists of addictive substances, so that the current model for the inclusion of addictive substances by the executive power has a legal framework and a constitutionally compliant solution is achieved,

- initiate the adoption of a unifying opinion on the determination of the quantity of more than small plants and fungi containing psychotropic substances for the purposes of Section 285 of Act No. 40/2009 Coll., the Criminal Code.

Recommendations for the field of gambling:

- set up a system of the taxation of gambling and games according to the level of their risks, including differentiation of the tax rate according to whether the game is operated land-based or online,
- optimise the distribution of gambling tax collections between municipalities and the state according to the type of gambling (online vs. offline),
- implement a ban on promoting gambling, including advertising and sponsorship (including restrictions on advertising and promotion on social media),
- establish clear rules for warnings on the risks of developing a gambling disorder in gambling advertising, promotion and sponsorship,
- establish clear rules for technical games regarding indicators of the length of participation in gambling and the overview of net losses since the activation of the user's account,
- consider introducing an obligation for operators to submit a risk analysis of the development of a gambling disorder with a proposal for preventive measures when applying for a gambling licence,
- introduce preventive measures according to the level of risks of individual games of chance, in particular to increase the protection of players of different types of online games according to their risks in terms of developing a gambling disorder,
- consider introducing an obligation for operators to intervene early with players who show signs of developing a gambling disorder.

11.3 Prevention and early identification of risks

Recommendations for prevention:

- define the role of ministries and other actors in the field of prevention and their responsibility for the implementation of the measures in this area,
- support the training of prevention workers at all levels (school prevention officers, health professionals, social workers and others) and support the inclusion of addiction issues in the basic pre-certification training of all physicians,
- increase the availability of systematic long-term general prevention programmes, not only in the school population,
- increase the availability of systematic selective and indicated prevention programmes for vulnerable groups and individuals,
- support prevention programmes in specific groups and environments with high risk of negative impacts (socially excluded localities, low-threshold facilities for children and youth, nightlife setting, young athletes at risk of a gambling disorder, etc.),
- support the research and evaluation of prevention programmes and interventions,

- promote cooperation between the various actors in the field of prevention at local level (community-based prevention),
- introduce and support early diagnosis and implementation of brief interventions in the health sector for all forms of addictive behaviour,
- introduce and promote early identification of addictive behaviour outside the health sector (schools and educational institutions, social care system, criminal justice system) and follow-up interventions,
- develop a model of system of funding in the field of prevention,
- renew the system of quality assurance (quality certification) of school prevention programmes and promote the implementation of only proven prevention programmes.

11.4 Addictology services network

Recommendations for services for people using addictive substances and people at risk of developing a gambling disorder:

- ensure funding and adequate staff of the existing network of services and ensure sufficient resources for further development of the network of addictology services,
- ensure optimal (regional) availability and accessibility of existing professional addictology services of various types, especially those with insufficient capacity and/or availability (outpatient treatment including psychiatric care, substitution treatment, detoxification, post-penitentiary care, day-care centres, etc.),
- expand the network of services and programmes to include newly addressed topics and target groups (multidisciplinary teams, case-management method, peer programmes, participatory programmes, child and adolescent care, housing first, housing and employment support, services for the elderly, services for parents with children with addiction, services for people with disabilities, social stabilisation programmes and services for patients with dual diagnosis, etc.),
- streamline the system and legislative framework for the provision of services at the health-social interface, increase the mutual permeability of health and social services and addiction care in prisons,
- support risk reduction programmes in the prison environment and increase their accessibility,
- ensure a system of quality verification (certification) of the professional competence of services,
- increase coordination of patient passage through the treatment and service system,
- support the implementation of treatment and harm reduction programmes based on the controlled use of substances and products with addictive potential (controlled consumption programmes, controlled substance administration programmes),
- define and create conditions for the provision of specialised addiction care in educational and therapeutic care facilities, create uniform tools for the identification of addiction problems and increase knowledge and competence in the field of addiction among workers in educational and therapeutic care facilities,
- increase the capacity of methadone substitution treatment programmes,

- increase the availability of buprenorphine treatment by increasing the number of prescribers and increasing the financial availability of buprenorphine preparations, e.g. by simplifying reimbursement from health insurance, increase the availability of buprenorphine in correctional institutions,
- increase the number of people tested for infectious diseases, especially HIV and HCV in low-threshold and other addictology programmes; increase the availability and accessibility of HCV treatment for drug users; fulfil the objectives of the document *Elimination of hepatitis C viral among drug users in the Czech* Republic and monitor indicators of the cascade of care for clients with HCV,
- support programmes to reduce the risks of overdose and the fatal consequences of overdose, including naloxone distribution programmes,
- support the piloting of drug consumption rooms to reach marginalised at-risk drug users and bring them into contact with services, thereby minimising the acute risks of health complications and fatal overdose,
- promote drug testing programmes that identify the content of substances and prevent health impacts on users, including the risk of death,
- increase access to tobacco addiction treatment in addiction services,
- expand the range of assistance provided online, including the use of information and communication technologies in working with clients (e-health, m-health).

Annexes

Detailed overview of the prevalence of addictive behaviour and its impacts in the Czech Republic

Prevalence of addictive behaviour in the adult population

- **17-23% of** the population aged 15+, i.e. **1.5-2.1 million** people, smoke cigarettes daily or almost daily
- **5%** of the population use e-cigarettes daily or occasionally, **3%** currently use heated tobacco products
- **10%** of people aged 15+, i.e. **800-980 thousand** people, drink alcohol daily or almost daily, **12-13%** drink excessively (60 g of alcohol or more on one occasion at least once a week or more often); these proportions are significantly higher for men – almost **3 times** as many men as women drink alcohol daily or almost daily
- **17-19% of** people, i.e. **1.5-1.7 million** people, are risky alcohol consumers, among them **9-10%** of the population **(800-900 thousand** people) fall into the category of harmful drinking
- **8-10% of** people aged 15+ have used cannabis in the last 12 months, i.e. an estimated **800-900 thousand** adults
- **2.3%** fall into the category of high risk of developing problems related to the use of cannabis, i.e. approximately **207 thousand** people
- **5-10%** of the adult population have used cannabis for self-medication in the last 12 months, i.e. an estimated **400-900 thousand** people, and **2-3%,** i.e. an estimated **160-240 thousand** adults, have used cannabis in the last 12 months exclusively for self-medication (excluding recreational use)
- **1-4%** of adults have used CBD cannabis and CBD products (cannabis with a predominance of non-psychoactive cannabidiol and low levels of psychoactive THC) in the last 12 months
- **1%** of adults have used ecstasy in the last 12 months, **1.5%** hallucinogenic mushrooms, less than **1%** of those aged 15 and over report current use of methamphetamines (or amphetamines) and cocaine
- **14-15% of** adults, i.e. an estimated **1.25-1.45 million** people, have used sedatives or hypnotics and/or opioid analgesics obtained without a prescription or used against the recommendation of a doctor or pharmacist in the last 12 months
- **0.65%** of the population aged 15-64 years, i.e. **44.2 thousand** people, are high-risk users of methamphetamine or opioids, of which **33.1 thousand** are high-risk users of methamphetamine, **6.4 thousand** use buprenorphine, **3.3 thousand** heroin and **1.4 thousand** other opioids
- **42.2 thousand** people inject drugs
- **35-50%** of adults aged 15+ years have gambled in the last 12 months, after excluding lotteries **8-19%** of the population have gambled in the last 12 months, **5-10%** of adults report online gambling
- **2-3%** of the population aged 15+ years fall into the category of problem gambling according to the Lie/Bet scale (i.e. approximately **170-220 thousand** people), of which **1.0-1.5%** (i.e. **90-120 thousand** people) fall into the category of high risk

Prevalence of addictive behaviour among children and adolescents

- **3%** of 11-year-olds, **18%** of 13-year-olds, **40%** of 15-year-olds and **54%** of 16-year-olds have tried cigarette smoking in their lifetime
- **10-11%** of 13- to 16-year-olds report regular or daily tobacco smoking
- **19.8%** of 16-year-olds had used e-cigarettes (whether or not containing nicotine) in the last 30 days, and similarly **11.2%** of 13- to 15-year-olds
- **17%** of 11-year-olds, **43%** of 13-year-olds, **76%** of 15-year-olds and **95%** of 16-year-olds have ever drunk alcohol (i.e. had at least one glass of alcohol) in their lifetime, with around half of them reporting drinking alcohol in the last 30 days
- **38.5%** of 16-year-olds have drunk excessive amounts of alcohol (i.e. 5 or more drinks on one occasion) in the last 30 days, **11.7%** have done so 3 or more times in the last 30 days
- **23.8%** of 16-year-olds have used any illicit drug in the last 12 months, **23.1%** have used cannabis, **3.5%** have used psychoactive medicines, **3.3%** have used inhalants, **2.6%** have used ecstasy, **1.1%** have used hallucinogenic mushrooms, **1.9%** have used LSD or other hallucinogens and approximately **1%** have used cocaine or methamphetamine
- **12.4% of** 16-year-olds have used any illicit drug in the last 30 days, **11.6%** have used cannabis and only **1.7%** have used a non-cannabis drug
- **9.2-10.5%** of 16-year-olds have gambled for money in the last 12 months

The impacts of substance use and gambling

- **16-18 thousand** deaths a year are caused by tobacco smoking; on average, there are **15** years of life lost for every 1 smoker who dies
- **7 thousand** cases of cancers of the trachea, bronchus and lungs (mostly caused by smoking) are newly diagnosed each year; over **5 thousand** people die of lung cancer each year
- **30 thousand** hospital admissions and over **3 thousand** deaths are reported each year due to chronic obstructive pulmonary disease (which is largely caused by smoking)
- **6-7 thousand** deaths a year are caused by drinking alcohol, with alcohol being the main or only cause of death in **2 thousand** cases, of which alcohol intoxication accounts for **400-500** cases a year; alcohol addicts die on average **24** years earlier than the general population
- **13-14 thousand** hospital admissions are reported annually for diseases entirely attributable to alcohol, of which around **8 thousand** are for alcohol addiction, **4 thousand** for alcoholic liver disease and **1 thousand** for alcoholic pancreatitis
- **96** people in 2020 died as a result of fatal overdoses of illicit drugs, inhalants and psychoactive medicines, of which **58** were overdoses of illicit drugs or inhalants – **28** involved opioids (including opioid analgesics, such as fentanyl, codeine, dihydrocodeine, hydromorphone, oxycodone), **20** cases methamphetamine, **1** case amphetamine, **1** case cocaine, **1** case GHB, **1** case THC and **2** cases inhalants
- **38** cases of overdose were related to psychoactive medicines, **13** of which were benzodiazepines
- **150** deaths from illicit drugs and psychoactive medicines were identified as being due to causes other than overdose, most of them due to illness, accidents and suicide
- **14** newly diagnosed HIV cases in 2020 were likely to be related to injecting drug use, **5** others had a history of injecting drug use
- **800-1000** cases of hepatitis C viral are reported annually to the Infectious Disease Information System, including **400-500** cases among people who inject drugs
- **37%** is the seroprevalence of hepatitis C viral among injecting drug users

- **14-15 thousand** hospital admissions are reported annually for injury under the influence of addictive substances, including **13.5-14 thousand** cases under the influence of alcohol, **250** persons are hospitalised annually for injury under the influence of illicit drugs, **150-200** persons under the influence of psychoactive medicines and **10-15** persons under the influence of inhalants
- **4.5 thousand** road accidents a year are caused under the influence of alcohol, **260** under other drugs
- **63%** of those at risk of problem gambling had an anxiety-depressive disorder in the last 30 days before treatment, with a further **20%** at increased risk of this disorder; **22%** of gamblers reported a suicide attempt

Service network for clients with addiction problems

- **250-300** facilities provide specialised addictology services, of which **55-60** are low-threshold contact centres, **50** outreach programmes, **90-100** outpatient treatment programmes (including **10** programmes for children and adolescents), **10-15** detoxification units, **25-30** inpatient healthcare units, **15-20** therapeutic communities, **35-45** outpatient aftercare programmes (of which **20-25** with sheltered housing) and **5-7** homes with special regime for substance users; **60** facilities report patients in substitution treatment and an estimated **600-700** general practitioners provide substitution treatment
- **206** low-threshold, counselling, and treatment programmes are certified in addictology services; **94** programmes are certified in the school-based primary prevention of risk behaviours
- **8.9** million syringes were distributed to people who inject drugs in 2020 (a year-on-year increase of **1.5** million syringes)

Finance, market, crime

- **CZK 2,297.5 million (€ 86.9 million)** was earmarked expenditure on drug policy not including health insurance **CZK 1,866.6 million (€ 70.6 million)** from the state budget, **CZK 340.6 million (€ 12.8 million)** from the regional budget and **CZK 90.3 million (€ 3.4 million)** from municipal budgets, of which **52%** was spent on law enforcement in the field of illicit drugs, **16%** on risk reduction, **12%** on the treatment of drug users, **4%** on prevention, **5%** on aftercare, **6%** on sobering-up stations and less than **2%** on coordination, research and evaluation
- **CZK 938.0 million (€ 35.5 million)** was spent by health insurance companies on the treatment of substance users, of which **CZK 113.4 million (€ 4.3 million)** in outpatient care and **CZK 824.6 million (€ 31.2 million)** in inpatient care; of the total amount, **CZK 201.7 million (€ 7.6 million)** was spent on treatment in the field of addictive diseases and **CZK 6.7 million (€ 253.4 thousand)** on treatment in the field of addictology
- **CZK 56.6 billion (€ 2.1 billion)** is the total social cost of alcohol consumption; in relative terms, the cost of alcohol in the Czech Republic was **1.2%** of GDP; in relation to tobacco smoking in the Czech Republic, the social cost is reported to be **CZK 80-100 billion (€ 3.0-3,8 billion)** annually; the social cost of illicit drugs in 2007 amounted to **CZK 6.7 billion (€ 253.4 million);** and the social cost of problem gambling in the Czech Republic was estimated at **CZK 14.2-16.1 billion (€ 537.1-608.9 million)** in 2012
- the state collects **CZK 60 billion (€ 2.3 billion)** per year in excise duty on tobacco products, which in 2020 was equivalent to **4%** of the state budget revenue; the state receives approximately **80%** of the price of cigarettes, approximately **60%** in excise duty and **21%** in VAT

- the state collects **CZK 13 billion (€ 492 million)** annually in excise duty on alcoholic beverages; around **CZK 8 billion (€ 302.6 million)** from spirits, **CZK 4.5 billion (€ 170.2 million)** from beer and **CZK 0.4 billion (€ 15.1 million)** from wine and intermediate products
- **23 billion** cigarettes are consumed annually in the Czech Republic, which corresponds to about **2,000** cigarettes per capita, i.e. about **100** packs of cigarettes per capita, including children; there are about **5,000** different tobacco products on the market for smoking, including about **490** brands of cigarettes
- **166.7 litres** of alcohol were consumed in the Czech Republic in 2020 per capita, equivalent to **9.7 litres** of pure alcohol per person
- **45 million** recommended daily doses of benzodiazepines are distributed to pharmacies annually, over **80 million** daily doses of Z-drugs (including 79 million doses of zolpidem), **52 million** daily doses of opioid analgesics
- **20.1** tonnes of cannabis drugs, **6.5** tonnes of methamphetamine, **0.7** tonnes of heroin, **1.0** tonne of cocaine and **1.2** million ecstasy tablets were consumed in 2016
- **CZK 33 billion (€ 1,248 million)** were lost by players in 2020 in gambling in the Czech Republic, **CZK 393 billion (€ 14,864 million)** were invested in the games and **CZK 360 billion (€ 13,616 million)** were paid out in winnings
- **15,000** crimes (out of 78,000 solved crimes), i.e. **16%**, were committed under the influence of addictive substances (of which **68%** under the influence of alcohol and **32%** under the influence of non-alcoholic drugs)
- **3.3 thousand** people were arrested, approximately **3.8 thousand** prosecuted, **2.8 thousand** accused and **2.5 thousand** convicted for so-called primary drug offences
- **167** indoor cannabis cultivation facilities and **160** methamphetamine laboratories were detected in 2020
- **645 kg** of marijuana and **15,000** cannabis plants were seized in criminal proceedings, as well as **1 kg of** hashish, **29 kg of** methamphetamine, **2.5 kg of** cocaine, **250 g of** heroin, **89,000** tablets and **21 kg of** ecstasy and **3,500** doses of LSD
- **14** substances were reported in the Early Warning System for New Psychoactive Substances, **5** of them for the first time

Available drug-related sites on the Czech Internet

The following list provides selected websites of key institutions and services in the field of drugs. A comprehensive list of aid organisations is available on the Help Map application on the website https://www.drogy-info.cz.

A.N.O. – Association of Non-Governmental Organisations (bringing together addictology and social services for people at risk of addictive behaviour): https://www.asociace.org/

Addictology in preventive and therapeutic practice: https://www.aplp.cz

Adiktologie – Professional Journal for the Prevention, Treatment and Research Into Addiction (archive, 2001-2015): https://www.medvik.cz

Adiktologie – Professional Journal for the Prevention, Treatment and Research Into Addiction: https://adiktologie-journal.eu

Agency for Social Inclusion (Department for Social Inclusion of the Ministry for Regional Development): https://www.socialni-zaclenovani.cz

Alcohol under control – information portal of the Department of Addictology of the 1st Faculty of Medicine, Charles University and the General University Hospital in Prague: https://www.alkoholpodkontrolou.cz

Alcoholics Anonymous: https://www.anonymnialkoholici.cz

Application for the management of client work in drug services – UniData: https://www.drogovesluzby.cz

Association of Shelters in the Czech Republic – Network of Actors for a Home: https://sad-cr.cz

Association of Social Service Providers of the Czech Republic: https://www.apsscr.cz/

Benzodiazepine Counselling Centre (operated by SANANIM): http://www.benzo.cz

Centre for Public Opinion Research (Institute of Sociology of the CAS): https://cvvm.soc.cas.cz

Chamber of Deputies of the Parliament of the Czech Republic, Committee on Health: https://www.psp.cz

Customs Administration of the Czech Republic: https://www.celnisprava.cz

Czech Association of Addictologists: https://www.asociaceadiktologu.cz

Czech Association of Addictology Students: http://www.addictology.net

Czech Association of Streetwork: https://www.streetwork.cz/

Czech Medical Association of J. E. Purkyně: https://www.cls.cz

Czech Neuropsychopharmacological Society: http://www.cnps.cz

Czech Statistical Office: https://www.czso.cz

DaDA – Paediatric and Adolescent Addictology (Society for Addictive Diseases of the CMA JEP): http://dada-info.cz

DAS project (Systemic support for the development of addiction services within the framework of integrated drug policy): https://www.rozvojadiktologickychsluzeb.cz/

Department of Addictology of the 1st Faculty of Medicine, Charles University and the General University Hospital in Prague: https://www.adiktologie.cz

Department of Pharmacology of the 3rd Faculty of Medicine of Charles University – Drugs and Drug Addiction: https://www.lf3.cuni.cz

Drug Counselling Centre (operated by SANANIM): http://www.drogovaporadna.cz

Drug information server (operated by SANANIM): https://www.drogy.net

EXTC – web-based counselling and prevention of the abuse of synthetic drugs (operated by Podané ruce): https://www.extc.cz/

Government Council for Drug Policy Coordination: http://rvkpp.vlada.cz

Information for workers and clients of field programmes and contact centres – eDECONTAMINATION (operated by SANANIM): http://www.edekontaminace.cz

Institute of Criminology and Social Prevention: http://www.ok.cz/iksp

Institute of Health Information and Statistics of the Czech Republic: https://www.uzis.cz

Ministry of Education, Youth and Sports: https://www.msmt.cz

Ministry of Health: https://www.mzcr.cz

Ministry of Interior: https://www.mvcr.cz

Ministry of Justice (official server of the Czech judiciary): https://portal.justice.cz

Ministry of Labour and Social Affairs: https://www.mpsv.cz

National Alcohol Reduction Support website: https://www.alkohol-skodi.cz

National Drug Squad of the Czech Police (Department of the Police of the Czech Republic): https://www.policie.cz/narodni-protidrogova-centrala-skpv

National Gambling Risk Reduction website: https://www.hazardni-hrani.cz

National HIV/AIDS Programme in the Czech Republic (website operated by the National Institute of Public Health): https://www.tadyted.eu

National Institute of Mental Health: https://www.nudz.cz

National Institute of Public Health: https://www.szu.cz/

National Monitoring Centre for Drugs and Addiction: https://www.drogy-info.cz

National Pedagogical Institute of the Czech Republic: https://www.npicr.cz

National Quitline (800 35 00 00): https://chciodvykat.cz

National Smoking Cessation Support website: https://www.koureni-zabiji.cz

Prague Hygiene Station (Health Promotion and Health Policy): https://www.hygpraha.cz/

Prevention of risk behaviour (Prevention-info.cz, a project supported by the Ministry of Education, Youth and Sports) https://www.prevence-info.cz/

Prison Service of the Czech Republic – General Directorate: https://www.vscr.cz

Probation and Mediation Service of the Czech Republic: https://www.pmscr.cz

Psycare: https://psycare.cz/

Register of Social Service Providers (Ministry of Labour and Social Affairs): http://iregistr.mpsv.cz

Research Institute of Labour and Social Affairs: https://www.vupsv.cz

SNASA – study on excessive alcohol consumption (questionnaire, NIMH): https://nudz-snasa.cz/

Society for Addictive Diseases of the Czech Medical Society J. E. Purkyně: https://snncls.cz

Society of Social Workers of the Czech Republic: http://socialnipracovnici.cz

State Agency for Medical Cannabis (SIDC unit): http://www.sakl.cz

State Institute for Drug Control (SIDC): https://www.sukl.cz/

UN Information Centre in Prague: https://www.osn.cz

Abbreviations

AA – Alcoholics Anonymous

AAS – Act No. 167/1998 Coll., on Addictive Substances

AG – Act No. 186/2016 Coll., on Gambling

AIDS – Acquired Immune Deficiency Syndrome

APHAS – Act No. 65/2017 Coll., on the Protection of Health against the Harmful Effects of Addictive Substances

AT – alcohol, toxicomania (designation of medical facilities providing addiction treatment)

CA – Customs Administration

CBD products – cannabis products with a predominant content of non-psychoactive cannabidiol

CC – Act No. 40/2009 Coll., Criminal Code

CO – criminal offence / criminal activity

DALYs – Disability-Adjusted Life Years

DAS – the project Systemic support for the development of addiction services within the framework of integrated drug policy (DAS project)

dg. – diagnosis

DLO – drug law offences

EMCDDA – European Monitoring Centre for Drugs and Drug Addiction

ESPAD – European School Survey Project on Alcohol and Other Drugs

EU – European Union

FCTC – World Health Organization Framework Convention on Tobacco Control

GBD – generally binding decree

GCDPC – Government Council for Drug Policy Coordination

HBV – viral hepatitis B

HCV – viral hepatitis C

HIV – Human Immunodeficiency Virus

INEP – training course in prevention (Introduction to Evidence-based Prevention)

LSD – lysergic acid diethylamide

NAUTA – National Survey on the Use of Tobacco and Alcohol

NMC – National Monitoring Centre for Drugs and Addiction

NGO – non-governmental organization

NRPHS – National Register of Paid Health Services

NRTUD – National Register for the Treatment of Drug Users

PPCC – pedagogical-psychological counselling centre

PWID – people who inject drugs

PWUD – people who use drugs

RDDs – recommended daily doses

RIA – Regulatory Impact Assessment

SEPA – System of Evidence of Prevention Activities

SIDC – State Institute for Drug Control

SPW – School Prevention Worker

TC – therapeutic community

TG – technical games

THC – delta-9-tetrahydrocannabinol

VAT – value added tax

WHO – World Health Organization

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Summary Report on Addictions in the Czech Republic 2021

This report is the first summary report of the Czech National Monitoring Centre for Drugs and Addiction on addictive behaviour in the Czech Republic.

The report summarizes situation in the field of use of tobacco and nicotine products, alcohol consumption, problematic use of psychoactive medicines, illicit drug use and gambling. It provides complex information on wide spectrum of addictions and contains information on markets and supply, legal framework, national strategy and policy in the field of addictions. It brings together information available from population and other sample surveys, data from health statistics related to impacts of substance use and behavioural addictions, to treatment of addictions. All at the same place, the report summarizes available information monitored annually, as well as ad hoc studies.

The report contains recommendations formulated on the basis of weaknesses of the current system identified within the complex monitoring of extent of addictive behaviour, its consequences and existing interventions of policy in the field of addictions.

The information presented in this report is based on the thematic reports produced by the National Monitoring Centre for Drugs and Addiction in 2021:

- Report on Tobacco, Nicotine and Related Products in the Czech Republic 2021
- Report on Alcohol in the Czech Republic 2021
- Report on Problematic Use of Psychoactive Medicines in the Czech Republic 2021
- Report on Illicit Drugs in the Czech Republic 2021
- Report on Gambling in the Czech Republic 2021

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