

Addictive substances, the risks of abuse and possible prevention

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Introduction

Accelerating the pace of life, societal pressure for intense performance, high urbanization, rising unemployment and anonymity to man stress factors and stress, which must somehow cope. This can take a variety of relaxation techniques, mental and physical activities to help with unpleasant experiences can weaken or displace. Longing for the fastest eliminate stress and induce pleasant feelings but sometimes outweigh the usual relaxation methods so that people seek out and use different addictive substances-drugs. Drug abuse is linked with many negative effects. The individual works that can induce changes in behavior, ie. considers the provision and use of the drug for the highest values of life. There is a loosening of social relations, leaving the afflicted family, respectively. ceases to be able to perform the relevant role in it. Released usual social ties addict gradually losing interest in the values, unrelated to the drug. With the taking of drugs is also linked to crime (drugs or obtaining funding for it, respectively. Spreading its illegal).

Substances, such as drugs of abuse are numerous. They comprise a completely natural and synthetic substances. Their effects on the human body varies considerably. I approach the company, respectively. State authorities are various - from complete tolerance to hard restrictions.

Basic concepts

Understand each drug substance with potential effects on the psyche, which may cause dependency and be harmful to individuals and society. According to another definition of a drug can treat any substance capable of changing one or more of the functions of the organism with more or less strong potential for addiction. Addiction is the result of periodic or continuous drug use.

The term "abuse" describes just such abuse to addiction. Dependent one usually does not happen right away. There are some drugs which have already after taking several doses there is a risk of addiction (heroin, methamphetamine), but mostly it is a process with several stages. At the beginning there is an experimenter, examiners and looking substance that would help him fight off boredom, diversified day and had forgotten duties, obligations, unpleasant experiences (generally 30-50% of juveniles). Continue the occasional weekend by taking drugs through regular use, when people have the illusion of complete control over themselves and abused substance. But this is very misleading and misconception. May be followed by stage-dependent users (approximately 5% of the experimenters), when there was trouble associating criminal behavior and violent crime, a great danger to society, unawareness of self-harm. Career addict ends either failure of vital functions, or criminal sanctions and social descent. The term "custom" is called moderate consumption of substances, usually in a socially acceptable limits (alcohol, coffee, tea, nicotine) or as recommended by your doctor or pharmacist (medication), the term "misuse" is most often associated with drug abuse (self-medication, their deliberate application to induce pleasurable states and relief, without correct medical justification).

Classification of drugs according to the "hardness" to "soft" and "hard" or "soft" and "hard" is very misleading. It depends not only on the toxicological characteristics of the substance itself, but also on the conditions of use, a situation in which one is located, its level of metabolism, etc. In the "soft" according to the division substances regarded with little risk of addiction and health complications in use (cannabis products, LSD), as "hard" the opposite (heroin, cocaine, methamphetamine). Alcohol would then be harder drug than marijuana and nicotine harder than opioids. More information provides sorting either by chemical structure or the type of addiction.

In addition to drug abuse in the strict sense, characterized by abuse of soft and hard drugs, there are also well-known "abuse of everyday life": smoking and alcoholism. And they may lead to severe psychological and physical dependence and endanger the health and life of those who have failed them.

Dependence diagnosis is usually possible to determine if the individual has been over the last year to meet three or more of the criteria (according Novotna, 1997, modified)

- strong desire or sense of compulsion to take the substance,
- difficulties in controlling substance use, both in terms of the beginning and ending, or the amount of substance
- occurrence of typical withdrawal symptoms and substance with the intention of search is reduced or eliminated
- card tolerance as requiring higher doses of substances in order to achieve effects originally induced by lower doses (eg dependent on alcohol and opiates, which can take a daily amount of a substance that would cause the failure or even killed by no tolerance)
- progressive neglect of alternative pleasures or interests in favor of the use of psychoactive substances and increased the amount of time to obtain or use the substance or recover from its effects
- continued use despite clear evidence of harmful consequences apparently damage to organs and tissues (liver, central nervous system, etc.).

We distinguish between physical and psychological dependence. Psychological dependence is a state of mind, manifested by a permanent desire of varying intensity continue using the drug, induce a pleasant feeling. There is a drug administration. Physical dependence is a state of the organism, resulting longer-term and more frequent consumption of drugs. The body adapts to the drug and include it in your metabolism. To stop the flow of drugs from outside the organism responds withdrawal syndrome symptoms.

Bio-psycho-social model of addiction counts with 4 factors:

- trigger (positive or negative event debugging, which provokes drug experience)
- drug (outside human society anonymous chemical, neither good nor bad)
- personality (apparently there is no clear-cut personality type predisposed to drug addiction, but it is possible to track risk factors and protective personality debilitating that it strengthens and protects against drug risk)
- environment (family, school, peers)

Theoretical models of addiction

The explanation of addiction is currently on several theories and models (Hrubá, 1999). All studies agree that a role in susceptibility to addiction has a genetic predisposition that affects both the perception and control of stress, and metabolic capabilities of the organism (sensitivity, effects, transformation, excretion). It is estimated that heredity contributes to the addiction of smoking from 52% and 30% of the alcoholism, caffeineism of 44%.

The models can be briefly summarized as follows (according to Hrubá, 1999):

- Neurobiological model assumes a direct drug effect on the nervous system, where the substance binds to the receptors, which makes multiple time. Neurons are gradually adapt and reduce its sensitivity, to achieve the effect of a higher dose is needed. In this model plays a key role in the development of tolerance and addiction withdrawal symptoms.
- The model of learning (classical conditioning by Pavlov) uses behavioral principles. Drug use causes physiological and subjective responses, is repeated in the same context and situations. Behavior that accompanies use constitutes an immediate and strong connection to the positive subjective feelings, respectively. the negative perception of abstinence.
- Cognitive social learning model emphasizes the interaction between environmental conditions and drug use, between individual and social environment. Application of drugs an individual learns by observing its environment, social, cultural, psychological and physical context, and this context validates their own knowledge.
- The model deals with the social context of the immediate factors that, although not directly influence the effect of psychoactive drugs, but they operate mainly on its availability. This includes both legislative norms of society (prices, sales methods), and social attitudes (tolerance drinking alcohol, smoking tobacco), the behavior of family members, socio-economic situation of the individual.
- Studying the cultural context model group, their common and unique characteristics.

The models are complementary and indicate the multifaceted problems of the origin and development of drug addiction. They represent a wide range of determinants, however, is not yet known in detail their relationship and the extent to which they contribute to addiction. It seems that it will be difficult, if not impossible, to determine the "ranking" the significance of individual factors, not only because it is different for each person, but also the same individuals throughout their lives.

Abstinence syndrome (withdrawal symptoms), there is a sudden interruption of the supply of drugs, which are used for a longer time. It has a very diversified picture and varies according to, inter alia, the type of substances used. most often manifests headaches, sleep disturbances, restlessness, loss of appetite, decreased activity, restlessness (with brutality, aggression), sometimes contrary apathy, lethargy, hallucinations, delusions, personality traits caricature user and depression (with suicidal tendencies).

Tolerance develops in certain substances in the course of their use. Originally un-dependent organism changing its metabolism and properties of the nervous system so that eventually requires higher supply of the drug to achieve a similar effect as in the beginning.

Even when they are in the public media environments mentioned repeatedly illegal substances in the Czech Republic is the first use of alcohol and tobacco on the other, and besides no age limit allowed by law (in both cases 18 years). The text focuses on the symptoms of acute intoxication or chronic abuse of the substances concerned, only briefly mention the division of drugs into groups and their appearance, withdrawal symptoms. With some of the information you may encounter quite frequently, while others are designed more for a doctor in the first line of contact (practices). Here are more signs and changes that you may notice teachers and parents, which can be a stimulus for further negotiations. We hope that this meeting was in most cases aimed at the restoration of the health of the child and his emancipation from the influence of drugs.

How do I know that it could be a substance abuse? (By Novotna, 1997)

We notice sudden or gradual changes in behavior, especially:

- irritability
- decrease in interest
- mood changes
- loss of friends
- neglect of basic hygiene habits
- noticeable changes in clothing
- search of solitude (departures away from home, late returns, a few absences, especially over the weekend), escapes from home
- refusing to accept authority
- absence from school, lying, secret phone calls
- losing money and valuables from home
- deterioration or significant fluctuations in welfare
- postponing duties, forgetfulness
- interest in discos, parties, reunions, clubs
- sleeping in the homes of friends
- literature search with drug themes

Suspicion of drug abuse is more likely to observe the:

- noticeable fatigue
- insomnia with nocturnal restlessness, excitability, irritability, or an increased need for sleep
- tremors, which can not be explained by disease or momentary distress
- feelings of persecution ("prosecute", paranoia)
- appetite with weight loss
- nausea, vomiting, stomach discomfort or, conversely, excessive appetite (eating sweets)
- conjunctival hyperemia
- dilated pupils, constricted at opiate vice versa

- dry mouth, stale and dry lips
- runny nose, cough, chronic bronchitis
- increased sweating

In doubt speak of substance abuse:

- admission of drug use
- pass drug urine (urine collection under supervision, in order to avoid confusion samples)
- Drug discovery and application equipment (needles and syringes, special pipes, papers for the rolling of cigarettes, cigarettes with non-tobacco content, medication wrappers, empty bottles of alcoholic beverages, "envelopes"-miniature envelopes about the size of a razor blade, used for packing drugs (meth, heroin).
- acute intoxication (drunkenness, intoxication)
- unusual creative energy, talkativeness, slurred speech with poor articulation, euphoric mood ("arousal")
- anxiety to depressive mood containing general attenuation
- laughter or crying
- movement disorders
- disorientation, difficulty in getting to know people
- somnolence
- disorders of consciousness
- traces with accompanying changes in vascular and skin, especially in the elbow, forearm, thigh, lower leg, in a landscape neck, abdomen, buttocks and experienced users requiring secure secrecy, and those who have experienced the devastation of the vascular system, punctures to locate sexual pubic hair between your fingers and toes to the scalp, under the tongue
- odor of volatile substances (breath, clothing)
- conflicts with the law-theft, aggression.

Rarely manages to capture direct the user or drugs in his flat. More likely it is finding residues of drugs, traces of their production and application, eg:

- scorched pieces of tin foil, aluminum foil, spoons
- strange odor apartment
- remnants of marijuana cigarettes with cardboard filter
- remnants of marijuana (or its direct cultivation at home)
- empty cans, wrappers unusual chemicals.

A brief overview of some drugs

Alcohol, ethanol, ethanol

Many children with alcohol first meets at the hands of their parents, they can offer "to taste", sometimes even at the age of 5-6 years. Approximately 20% of people refusing alcohol, 80% with him in life meets more frequently and repeatedly, of which 10% will be alcohol problems yet nestupňují, about 3% of the problems escalate.

Alcohol and tobacco are also sometimes referred to as pass-through drugs. It means that some people after some time passes since these substances to drugs "harder". Risk of harmful drug use is likely to increase in the population, which has early experience with drinking alcohol and smoking tobacco. Media often mentioned marijuana also plays a role, but less frequent.

Socially, the risk of alcohol abuse in the Czech Republic is very underrated and drinking alcoholic beverages largely accepted and tolerated. The purchase and consumption of our legal system is allowed from 18 years of banking experience, however, shows that the age limit is often not respected. For alcoholic beverages are considered beer, wine, spirits and other beverages containing more than 0.75 percent alcohol by volume (see Table 1).

The origin of alcohol

Simple molecule of alcohol (C_2H_5OH) is generated by the action of yeast fermentation of sugar. At a concentration of 14-16% alcohol solution in yeast die. Concentrated alcoholic products can be obtained by distillation. Alcohol is one of the most widely known and longest agents among us. Drinks with the small amount of help to stave off thirst and have always been the effect of changing human psyche. The very word "alcohol" is of Arab origin (al-Kahal) and originally meant a very fine substance.

Ethanol penetrates easily into various organs including the brain. Its content in alcoholic beverages varies from about 2-3% (beer) to about 40% in the distillates. Important not only the concentration of alcohol, as well as its quantity. In one 12o beer is about the same alcohol content as wine in 2 dl or 0.5 dl distillate.

Table 1: The most commonly used alcoholic beverages and alcoholic thereof

Drink	Origin (manufacture)	Usually % alcohol
beer (0.5 l, 12.9 -15.4 g 100% spirit)	broth of pullulated grain	1.6 - 5.4
wine (2 dl, 20 g 100% spirit)	fruit juice	11 - 20
vodka (0.5 dl, 20 g 100% spirit)	base material grain	40 - 50
whiskey	corn or potatoes	40 - 50
cognac	distilled wine	29 - 60
brandy	distilled wine	29 - 60
liqueurs	solutions of alcohol in water	35 - 40

Metabolism of alcohol

In the digestive tract, the alcohol very well absorbed, smaller quantities already in the oral cavity, the largest portion of the stomach and the beginning of the small intestine. But is easily absorbed from the rectum, skin, particularly children (very dangerous wraps with alcohol to reduce fever) and in the form of vapor and respiratory tract.

Alcohol in the body is converted into acetaldehyde and further to the acetic acid, which can be directly used as an energy source, or give rise to fatty acids as a component of fat. The conversion takes place mainly in the liver cells. The energy value of alcohol is relatively high (29 kJ.g⁻¹), the balance of its consumption is more complicated, because in alcohol poisoning is also on the current energy expenditure (higher heat losses, additional losses at the expense of reduced coordination of muscle groups, etc.) and its rate of degradation in the body does not follow the usual mechanism for utilization of essential nutrients.

A small amount of alcohol (blood concentration corresponding to about 0.04 ‰), occurs in the body naturally, thanks to some part of the fermentation of digesta normal intestinal microflora, as well as metabolic waste products.

Recognition of addiction

Descriptive characteristics of alcohol dependence is strong, sometimes overwhelming desire to take alcohol with consequences that it brings. Definitive diagnosis of dependence should be determined as if the effect of the last three or more of the criteria mentioned above. 7-10% depending forfeit drinkers according to the sensitivity and long-term impact of the social environment. Research has found that a higher number of alcoholics in families where often the father or other family member has an alcohol problem. Is there a link between the genetic makeup of the individual and the risk of alcohol abuse.

Europe is today one of the largest producing continents and also alcohol consumption. In the Czech Republic the situation is quite serious, after a slight decline in consumption in the 80 years have now increased again, traditionally high consumption of beer. Expenditure on alcoholic drinks now make up 20% of the total expenditure of the family budget. Warning group are especially juveniles, in which there is rapid development of psychic and physical dependence earlier than in older adults. Growing number of alcoholics and lowers their age limit. Drinking alone is a unique phenomenon, often are "drinking party", which do not remain only in alcohol abuse. Also a growing number of female alcoholics.

The starting alcohol problems can indicate early signs over time is accompanied by signs of long-term consumption of drinking.

The early signs include:

- alcohol in the breath (sometimes camouflaged candy, mouthwash, gum, etc.)
- red eyes
- impaired motion interplay
- the hangover headache
- unsteady gait, drowsiness
- slurred pronunciation
- verbal and physical aggression.

Signs of long-term drinking includes:

- windows (the person does not remember what she did under the influence of alcohol)
- shivering, although alcohol has been ingested
- solitary drinking, drowsiness, greedy drinking, loss of non-drinkers friends
- increased accidents, falls, burns, cuts
- physical illness (eg liver, stomach and bowel, high blood pressure)
- reduced ability to control and stop drinking.

The effects of alcohol on the human body

According to the degree of violation of motor, sensory and mental functions recognize some basic stages of intoxication:

- drunkenness - shallowest level may not be visible area is detectable detailed examination (for example, there is the extension of the reaction time)
- slight degree of intoxication - a striking change in behavior, increased psychomotor activity, talkativeness, anti-social manifestations and acts of physical insecurity, grogginess, impaired sensorimotor functions (most sight, hearing later)
- medium degree of intoxication - a significant downturn, psychomotor retardation, difficult to understand and babbling speech, less attention falls
- severe degree of intoxication - dullness, disorientation, inability to walk independently without support
- following stage is already severe alcohol poisoning with disorders of vital functions.

Acute alcohol poisoning takes place in several stages:

The first stage is to excite the victim, who is talkative, sociable, subjectively experiencing a state of satisfaction and good mood - euphoria. In the framework of the distorted self-worth and in particular more or less overestimated his ability. At levels in the blood of 0.5 to 1 ‰ to become intoxicated very dangerous driving. A similar effect of smaller levels (up to 0.2 to 0.3 ‰) is controversial. There is a random acquaintances and making sexual contacts, leading sometimes to STD transmission or unintended pregnancy.

The next phase of poisoning is characterized by attenuation. Sometimes it is more sensitive to the phase narcotic and hypnotic, the border is a blood alcohol level of 2 ‰. The victim gradually comes downturn, leading eventually to a drunken sleep or unconsciousness. The cause of death at this stage are different poisoning incidents involving drunken apparent inability to handle the situation, how to sober mean virtually no exposure (extinction basic defensive reflex - coughing, sneezing, motor). When blood alcohol levels above 3 ‰ gradually emerges attenuation centers in the brain control activity of smooth muscle in the walls of blood vessels, respiration, heart rate and other functions necessary for life. Levels around 4 ‰ are practically only surviving contemporary medical care and support of vital functions.

Drinking alcohol also causes irritation of the stomach, often accompanied by vomiting. Choking on vomit is also a common cause of sudden death after ingestion

of alcoholic beverages. Continuity blood alcohol levels change feelings and behavior are illustrated in table number 2.

Table 2: The level of alcohol in the blood, changes in feelings and behavior

BAC [‰]	Changes in feeling	Changes in behavior
0.4 ‰	sense of release	higher risk of accidents
0.6 ‰	mood swings	impaired judgment and the ability to make decisions
0.8 ‰	feeling of warmth and euphoria	weakening inhibitions, impaired perception and self-control, the risk of accidents
1.2 ‰	excitement, emotion	chattiness, impulsivity a risk of rash conduct
1.5 ‰	forgetfulness, lethargy	tendency to violent behavior and slurred speech
2.0 ‰	noticeable drunkenness	diplopia, memory problems, difficulty with speech, sleep
3.0 ‰	possibility of unconsciousness	person does not respond to external stimuli, the risk of vomits aspiration
4.0 ‰ and more	profound unconsciousness	risk of respiratory centre failure in brain and asphyxiation ,death threats

BAC=Blood Alcohol Concentration [‰]

Alcohol level C_t (per mille) in B_t -time (in hours) from start drinking can be calculated by the formula:

$$C_t = (a/p.r) - B_t$$

wherein:

a- the amount of ingested alcohol in grams

p - weigh of person in kilograms

r - gender factor (male approximately 0.7, female approximately 0.6).

From the aforementioned formula can also deduce the adverse conditions in children. They are less massive, and the value r is in them (depending on age) even smaller than in women. Therefore easier to reach high, incompatible with survival, levels of alcohol in the blood. Especially in a party is not a problem Passion dose drink alcoholic beverages. There are problems with some products containing a high proportion of alcohol as a solvent (windows, Iron) whose purchase is for young and financially viable.

In terms of long-term relationship to alcohol consumption can be divided into four types:

- abstinent: enjoys no alcoholic beverages
- consumer: enjoys is in accordance with social conventions (beer after a fatty meal, celebrations, etc.)
- drunkard: actively seek socially acceptable reasons for drinking
- alcoholic: has been addicted to alcohol, it is like a drug.

How different stages is due to the frequency of consumption of alcoholic beverages, both age (the older the man is relatively more resistant to alcohol), gender (women are becoming addicted significantly faster) and genetically. There resistant ethnicity (eg Central Europeans) and ethnicity highly sensitive (eg, Eskimos, North American Indians). Tolerance to alcohol gradually grows to the point drinker (for self-control when drunk, alcohol level and its rate of degradation is unchanged), for advanced drinkers begin to diminish, strong alcoholic shows considerable signs of intoxication even in small doses.

Alcoholism is also divided into types alpha to epsilon:

- type alpha: is irresponsible drinking, which can cause problems is controlled, but threatens his transition to the type of gamma
- alcoholism is a type of beta without habituation, the diseases caused by chronic poisoning
- type gamma is classic addiction to increasing tolerance and metabolic changes, withdrawal symptoms in the absence of drugs, and loss of control drinking
- • type delta corresponds protracted drink without losing control, inability to abstain, it can be characterized as "never completely drunk, never quite sober"
- the type epsilon - alternately in tumultuous excesses, "raves", with longer periods of abstinence.

Alcoholism, especially gamma type, is characterized by a classic disruption of social and family relationships and changing life values, in addition, there are some notable physical and mental disabilities.

The impairments prevails liver cirrhosis, sometimes leading to death for their failure. It may also be affected by the lining of the gastrointestinal tract with reduced ability to absorb certain nutrients, which is exacerbated by generally very poor nutrition alcoholics. Are also frequent inflammation of nerves with outages sensitivity and sometimes nerve pain. Appears alcoholic tremor. More recently discussed the relationship of alcohol and solid cancers (such as through inhibition of the immune system and the possibility of enzymatic activation of hazardous substances, even though he himself is not a direct carcinogen). It has been demonstrated interaction of smoking and alcohol on cancer of the oral cavity, tongue, pharynx, larynx and esophagus.

Already at five years-long abuse may be demonstrable cerebral atrophy, followed by the development of psychiatric symptoms. It can be stated as delirium tremens (severe confusional state accompanied by anxiety and terror that inspires hallucinations), various alcoholic psychosis or alcoholic epilepsy. Now the central nervous system involved in the subsequent disruption of family and social ties alcoholic.

The circulatory system was an effect of small doses of alcohol as a protective factor against atherosclerosis. It is also known to increase blood pressure and heavy alcohol drinkers and wine described enlargement of the heart. The above-mentioned loss of immunity can result in increased susceptibility to pathogenic microorganisms, as well as one that does not endanger a healthy person. When alcoholism is described as bone marrow disorder, with internal secretion glands and other organs.

Consumption of alcoholic beverages as a preventive factor not generally recommend, because each person has a different sensitivity to alcohol and dependence potential threshold, ie. that even relatively low doses of drinking for long enough that it could endanger them. The World Health Organization (WHO) published a data informing about even "safe" dose of alcohol, which should be generally healthy adult population tolerated. It is a maximum of 20 g 100% alcohol per day (16 g for women and 24 g for men). 20 g of pure alcohol is approximately 0.5 liters of beer or wine, 2 dl or 5 cl liquor. In addition, the cardioprotective effect on circulatory system and participates more substances type antioxidants (flavonoids) with a similar effect as with vitamins A, C or E (uptake and disposal of corrosive particles originating from the metabolism, protection of cell membranes).

As is evident from the above, are somewhat more sensitive to alcohol than men. Alcoholism in women takes on extra aspect of possible birth defects. According to the latest findings mean conceiving a child while drunk or unique moderate intoxication in pregnancy special influence on his later health. Far more serious is repeated, perhaps even slight drunkenness, inducing during pregnancy. Children of alcoholics are born with the FAS (fetal alcoholic syndrome) tend to have lower birth weights, are immature, more likely to die at an early age (and not just for poor care in the family) and endowed with a bring and permanent brain damage, persistent life.

The alcohol is also shown teratogenic effects, birth defects, resulting in a severe defects - monsters.

In general, children are more vulnerable to acute alcohol intoxication and the formation of habituation. Habit they develop significantly faster and more severe physical dependence occurs very soon. Parental alcoholism affected the older children. Demonstrably worse learn and fully use their intelligence. They also have a variety of emotional problems in later life and the establishment of partner relations.

Pathologic intoxication is severe intoxication caused by unusually small dose of alcohol. It can be caused by a permanent disposition, certain neurological or metabolic diseases, like state induces a combination of alcohol with some drugs (therefore prefer alcohol with drugs never stirred).

Very important is the overall handicap alcoholic personality. Alcoholic (often repeatedly) fails in marriage. Gradually, with him appearing severe disruption of relationships, which are given the impossibility of fulfilling the essential partner functions (including sexual), morbid jealousy on alcoholic psychoses, etc. Personality alcoholic decline and morally, there are lies, fraud, criminal offenses. This accumulation of conflicts in accessing employment, often associated with loss of space or moving to get worse and worse paid job. Comes with squabbles in the home and the wider family. Disruption of the family with the simple existence of an alcoholic in it suffer especially children. They are often obstructed regime, difficult conditions for school work and extracurricular activities (eg due to the economic situation of the family). In many cases they are mistreated or abused (the issue of CAN, Child Abuse and Neglect, syndrome maltreated, abused and neglected child).

Children from such families affected often adopt similar family background as standard, which will then be consciously or unconsciously imitate.

A negative feature of contemporary Czech society is considerable social tolerance towards alcoholism. For this reason, often the first activities of the wider family and professional background of alcoholic pops up at the time of significant psychological, physical and moral degradation. Alcoholism is also women in the early stages oblique. Important role in the fight against alcoholism plays legislation, which passed through many changes, and to be able to integrate into the European context.

Alcoholism Treatment is happening on several levels (pharmacotherapy, psychotherapy, family therapy, etc.) to be mutually combine and timing. They participate in the organization of the state, church, private, civic associations. The school plays an important role in the prevention of alcohol abuse. Its action lies in both the overall value orientation and in the targeted alcohol education, which is divided into different subjects, which can be used to induce the subject matter and topic of alcohol and its harmful effects, the possibility of rejection, the effects of advertising. Can be effectively utilized peer programs (peer-programs). It is very important and complex of the teacher as a positive personal pattern. In case of acute alcohol poisoning (especially in various extracurricular events) should immediately discontinue further supply materials, provide first aid to maintain vital functions, call ambulance and escort victim for treatment.

Tobacco

History

Inhalation or direct smoking fragrant leaves, fragrant spices and drugs occurs in human society for many thousands of years, a document which has been mention in the habits and culture of the Chinese, Ancient, Celtic, Indian. Tobacco smoking famous Indian culture. The Columbus expedition tobacco was imported into Europe in 1492, its seeds two decades later. The scientific name is derived from tobacco after the French ambassador to Portugal, Jean Nicot, who his seeds shipped to France, where he soon expanded smoking. Tobacco was (just like opium - laudanum) as a remedy for many ailments.

Initially, tobacco was grown in Europe as an ornamental plant, only sparsely as commercial crop. He smoked in the form of modified dried and twisted leaves, later using pipes. Spaniards began manufacturing cigars in the early 18th century, the first cigarettes came into existence around 1830 (USA, during the civil war, North against South, made a machine for their production) and now crowding out other ways as best meet the need of the consumer society, the hustle and fast pace of modern times.

In other European countries to a greater extent, began to smoke the pipe during the Thirty Years War, and then the campaign for Napoleon, when the first cigarette. Extending the habit of cigarette smoking among men is characterized for the first half of the 20th century, among women, the epidemic of smoking to become more common after the World War II. In the postwar period, the smoking habit so striking that even some experts discussed "pathology of non-smoking."

Cheap, easily available cigarettes facilitate social communication were considered as the expression of modern, sophisticated, intellectual way of life. The turning point in this concept of smoking occurred in half of the 50 years, when it was conclusively proven serious health consequences of smoking and the public was

made aware of them. In many industrialized countries in Europe, USA, Australia occurs from mid-60s years to a permanent reduction in the frequency of smokers, especially among younger men and middle age with higher education and higher socio-economic status.

In the West, smoking is increasingly becoming a matter of people from lower social classes, inactive or auxiliary unskilled workers with incomplete or only primary education, delinquents, alcoholics, drug addicts, antisocial people, but also ethnic minorities.

In the former communist countries of the East and some areas occupied by humans to consume tobacco just the opposite attitude. Perceive smoking as a sign of wealth, power, success and social prestige, and downplay the health risks and consequences.

Forms of consumption

At present, the most widespread in the population smoking factory-produced cigarettes. Smoking pipes and cigars to adopt at least among women, men are also frequency pipe and cigar smokers is significantly lower than cigarette smokers. Cigarette smokers inhale deeply ("draw"), which leads to the penetration and absorption of chemicals from the lower parts of the respiratory tract, in addition to the flue gases of tobacco products are added in cigarette paper containing a substantial portion of carcinogens. In contrast, smokers smoke cigars and pipes retained in the upper parts of the respiratory tract.

Chewing tobacco and snuff (known as smokeless tobacco) is not common in the Czech Republic, has a tradition of more overseas (some areas of the U.S.), and even among preschool children (as early as kindergarten). Chewing tobacco also resorted young people from higher social strata for which the cigarette smoking was socially unacceptable or workers in high-risk occupations where there is a risk of fire and explosion from open flames (such as miners). Development of pharmacological dependence is unavoidable smoker or smokeless tobacco is associated with other adverse health effects.

A special form is also involuntary or passive smoking, ie. exposure of nonsmokers to cigarette smoke. Involuntary current smoker inhales cigarette smoke from a burning cigarette or butt, which is contained in the result of incomplete combustion of larger quantities of hazardous chemicals (such as carbon monoxide, tar, ammonia, nicotine, benzo-a-pyrens). Health damage due to involuntary smoking is generally accepted affects most children smoking parents, and even before their birth, if a woman smokes during pregnancy.

Effects of nicotine

For the occurrence of pharmacological tobacco dependence corresponds alkaloid nicotine. Chemically as a liquid substance, pyridine-N-methylpyrrolidin. The plant is bound to organic acids (malic or citric), the amount of up to 8%. When smoke is released and passes into the smoke is absorbed through the mucous membranes especially of the gastrointestinal and respiratory tract. Passes into breast milk and is evidenced by its transfer placenta to the fetus.

Nicotine is one of the mitotic poison, affecting the cell nucleus, increases the excitability of the central nervous system, it is paralyzed. In smaller doses multiplies the secretion of saliva, gastric juices and sweat. After smoking increases vascular

tone with spasms of arteries and arterioles in the legs. Blood vessel reaches a maximum 10 minutes after smoking, improves after half an hour.

Dose of 60 mg of nicotine reliably kills in 10 minutes, its effects can not be avoided. The cigarette is absorbed 1-2 mg cigar to 10 mg. Death was observed after 18 dýmkách, with another victim after 40 cigarettes and 14 cigars within 12 hours. Harmfulness of smoke depends also upon the speed of inhalation and smoking. You can not ignore that smoking promotes the development of gastric ulcers and colic, myocardial infarction, lung cancer, etc. (Performed also accompanying substances in smoke, were identified in total more than 4000).

In tobacco smoke other than nicotine and pyridine find principles, hydrogen cyanide, ammonia, carbon monoxide, carbon dioxide, methane and hydrogen sulphide. Acidic non-volatile component Smoke contains mainly organic acids.

Severe nicotine poisoning manifests headache, pallor, sweating, dizziness, nausea and vomiting, tremor, diarrhea.

Nicotine is a psychoactive drug also produces a wide range-stimulant and depressant effects in the central and peripheral nervous system, endocrine, cardiovascular and other organ systems, including the release of skeletal muscle, activation of the cortex, increased levels of neurotransmitters (neurotransmitters), some hormones and blood sugar. The reactions are dose-dependent. Recall a pleasant mood in smokers is attached action of dopamine, stress reduction leaching adrenocorticotrophin, increase the current performance (especially for simple tasks) supports norepinephrine and acetylcholine.

Pleasant conditions after consumption of nicotine-induced increases in smoking individuals likelihood of recurrence of smoking. The earlier positive effects appear after use of the substance, the more often they use repeated.

Smokes out of boredom, out of self-consciousness at work, to soothe, to improve performance, to achieve a certain state of euphoria. Remarkable is the desire to smoke after a meal, the favorable effect of smoking on the morning defecation and unpleasant spastic conditions of the gastrointestinal tract (cigarette fasting has a disagreeable effect). Smoke diverts attention, the mental work is sometimes rest. The pleasure of smoking affects largely observing smoke.

Dependence, withdrawal symptoms, tolerance

It shows that of dependence is important repeated use of substances and the rapid onset of psychoactive effects, which meets smoking. The first dose of nicotine reaching the brain within 10 seconds. Within one minute, it creates a concentration sufficient to induce a response by a person subjectively steaming thereof.

To create a dependency contributes to the whole ritual of smoking, such as handling a source of fire, the way cigarette ignition and re-inserting a cigarette into his mouth.

Smoking creates typical pharmacological and psychological dependence. Smokers after understanding the effects of nicotine through soon learn to control and channel their emotional balance. At the same time, they find that they can hardly give up smoking, even though they are aware of its harmful health consequences.

The development of regular smoking usually takes about two years and takes place in several stages:

- at the beginning is psychosocial motivation that encourages smokers first attempts, which are considered as a significant risk factor for the development of future smoking
- in the next stage the smoker lights a cigarette because of the positive effects of nicotine
- and finally develops addiction to nicotine; seen the emergence of typical tolerance and withdrawal symptoms from lack of nicotine in attempts to quit smoking.

The pharmacological addiction include behavioral dependency, that is related to behavior. The actual act of smoking is a ritual that allows the smoker to handle boredom, to attract attention, to mask the expression of emotions or indecision. These aspects should be to identify and apply for smoking cessation.

Experimental smokers often experience unpleasant symptoms. To these symptoms are dissuaded from further smoking, the tobacco industry is developing various kinds of starting tobacco products: cigarettes in the reduced nicotine content (light, ultralight), various allowances mask the odor and reduces irritation of the mucous membrane so that it is temporarily insensitive (menthol).

Withdrawal symptoms appear as early as 2 hours after the last smoke, reaching a peak after 24-48 hours and last for several days to weeks. Manifested most often as irritability, frustration or anger, anxiety and depression; difficulty concentrating, fatigue, sleep disturbances, decreased heart rate and increased appetite, weight gain.

Withdrawal symptoms occur in 80% of smokers who had smoked during the life of at least 100 cigarettes, just three months roughly one cigarette a day. More than 80% of smokers would like to quit smoking, about 35% of it annually try, and only about 5%'s successful abstinence.

Approximately three quarters of adult smokers first met with tobacco aged between 11 to 17 years ago. Similarly, those who smoke only occasionally, began experimenting in puberty and adolescence. Beginning at the age of adolescence, smoking increases the risk of smoking in adulthood to sixteen. The earlier you start smoking, the more cigarettes smoked a day in adulthood, and the more serious are the health consequences of smoking. The beginnings of smoking is increasingly shifting to the younger age and smoking or any other form of tobacco use is one of the leading teaching and pediatric problems.

Addiction also helps a number of social factors (observing the surroundings, smoking in different situations and moments on the availability and selling tobacco products, socio-economic status of the individual, social tolerance, smoking in the family, legislation). Children and adolescents smokers use cigarettes as an unofficial "tender", get them tickets to a certain social group and its activities. They gain a sense of normality of their behavior, and if other companies tolerates this behavior, gradually originally classified social ritual in everyday life outside the group. Their behavior shield themselves in the spirit of tobacco advertising slogans on the right to free choice. Dependence is then develops as a consequence of more frequent drug use, which nobody does not. Significant importance is also the personal immunity syndrome (nothing will happen to me whenever I stop, I'm the master of himself).

The described models are complementary and indicate the multifaceted issue of smoking initiation and the gradual emergence of addiction.

It was confirmed that the regular consumers of nicotine, cocaine and heroin dependence occurs consistently at 80-85% of consumers of all three substances mentioned. However, there is evidence that among occasional smokers addiction develops most often: up to 32% compared with 23% for occasional consumers of heroin and 15% occasional drinkers alcohol or cocaine.

Tolerance for smoking is first seen as a situation in which a smoker ceases to perceive the effects of nicotine that he was initially uncomfortable (smell, nausea, vomiting, diarrhea). For most smokers, the number of cigarettes smoked per day increased over the years.

The degree of nicotine dependence can be assessed in different ways, is most often used Fagerström questionnaire. Indicatively shows the efforts which the smoker trying to create and maintain blood nicotine, which guarantees the desired effect. Item questionnaire chart number and brand of cigarettes smoked per day, smoking habits, drug withdrawal symptoms.

The health consequences of smoking

Smoking is not just a bad habit and addiction, but it is a chronic, progressive and recurrent disease with pandemic occurrence.

The World Health Organization states in its literature that die from smoking every year 4 million people around the world. In industrialized countries, the death rate from smoking is higher than in developing countries. Czech Republic contributes to this horrific statistics almost 25,000 deaths per year (that is, an average of 63 people a day, two to three people every hour). Prematurely, ie before the 69th year of age, smoking becomes a victim of 44% men and 14% of women in the country. This number is about 7 times higher than the number of deaths as a result of accidents and homicide.

Of the 3,000 children in the U.S. who smoke every day trying their first cigarette, and so the first step on the road leading to the possibility of becoming a regular smoker in the future there will be about 23 killed, 30 were killed in traffic accidents and 750 will die prematurely from smoking . Smoking is thus the largest independent risk factor for the health of the population that is completely preventable.

According to the latest forecasts, smoking kills during the next century a billion people, if not already taken radical measures.

Most often the harm associated with smoking cigarettes, during which they are 4-5 thousand different chemicals with toxic, mutagenic, teratogenic and carcinogenic effects (see Tab. 3). Smoking affects the body by different mechanisms, and therefore the spectrum of health damage is wide (by Hrubá et al., 1999, 2002):

- it is the leading cause of lung cancer and bronchitis, malignant tumors in the oral cavity, larynx and esophagus
- contributes significantly to cancer of kidney, bladder, cervix, pancreas
- is an important risk factor in the development of cardiovascular diseases (atherosclerosis, coronary heart disease, myocardial infarction, stroke)
- is a major cause of chronic respiratory disease (chronic bronchitis, emphysema)

- a significant contributor to the development of peptic ulcer disease, stomach and duodenum, menstrual cycle disturbances in fetal development during pregnancy, women smoking during pregnancy tend to have more spontaneous abortions and premature births, their children at birth tend to have lower birth weights, are more vulnerable to sudden death in neonates and infants (SIDS)
- Children born to smokers suffer more frequent neuromotorickými problems in the infants perform worse performance in school and more likely to commit criminal offenses after reaching adulthood, all differences to the population of smokers are statistically significant and independent of the social level of the family.
- causes severe developmental disorders and sperm function, smokers are often infertile and participate in the more frequent occurrence of congenital defects in their offspring
- adversely affects the physiological state of the skin, contributes to premature wrinkling, to the development of degenerative changes associated with aging
- act irritating to mucous membranes and upper respiratory tract and conjunctiva and adversely affects the immune system, helps to reduce resistance to infectious diseases.

Table No. 3: Selected chemicals in cigarette smoke and their main health effects (Hrubá, 2002)

Substance	Effects
Nicotine	Central nervous system, autonomic nervous system, hormonal control, cardiovascular and digestive tract (spasm of blood vessels, increased blood pressure, secretion of saliva, peristalsis), drug addiction
Carbon monoxide	Strong binding to hemoglobin, the oxygen supply to the tissue deterioration
Ammonia, nitrogen oxides, aldehydes, phenols	Mucosal irritation, chronic inflammation
Benzene, benzo-a-pyrene, biphenyls, nitrosamines, naphthylamine, tar, aniline, arsenic	Carcinogenicity
Cadmium, polychlorinated dioxins, pesticide residues, toluene, phenol, methane, methyl chloride	Teratogenicity, specific toxicity

Note: These and many other substances are not inhaled by the smoker, but are released into the air from burning cigarettes, and are thus inhaled by passive smokers.

For most health damage has been demonstrated cumulative effect, ie. relationship between dose and effect. For lung cancer, bronchitis and, moreover, greatly increases the risk of developing this disease in people who started smoking regularly before the 20th year of his life. Health threat smokers decreases after smoking cessation (see Tab. 4).

Table No. 4: Health as a reward for overcoming nicotine addiction (by Hrubá et al., 1999, 2002)

Time	Effect
within 20 minutes	blood pressure and heart rate to return to a level that the patient had before smoking
within 8 hours	carbon monoxide and oxygen concentrations in the blood return to normal
within 72 hours	increases lung capacity
for 2 to 5 years	the risk of cardiovascular disease is reduced to the level of non-smokers
for 10 to 15 years	the risk of death from lung cancer and bronchitis is reduced to the level of non-smokers

All of these benefits, however, you lose, return to smoking again, even just one cigarette a day!

Prevention and treatment of nicotine dependence

The most critical period for the establishment and development of smoking habits between the age of the tenth to the fifteenth year. Often smoking tested younger children, but their smoking activity usually ends with the first failed attempts associated with unpleasant experiences. The cigarettes are returning early in puberty, when the main motive is the desire to be smoke free, more mature, imitating peers or other patterns. For children at a young age is crucial parental smoking and their views on smoking. Later, the child is influenced mainly friends, classmates, mass media advertising.

The largest experience with various educational programs in lifestyle are overseas (North America), where they prepare and evaluate the effectiveness pays systematic attention. For the project of anti-smoking education in schools there was created a special advisory group of experts, on the basis of past experience, developed key principles that should be considered in each individual educational program.

Principles include the necessary parts (according to Hrubá, 1999; according Nespor, 1997):

- creation of pressure, thrust to achieve the desired behavioral change. It is a set of partial results, such as a change in attitudes, age shift starts smoking, reducing the number of smokers in the long run, reducing the number of cigarettes smoked per day, and so on. Any positive change in the behavior of individuals and groups affected by the indicated areas means that the educational program was successful.
- the focus of the project: an educational program in the school can only relate to education for smoking, or more factors, and the second option is much more challenging, but more effective, because the complex influences of lifestyle and offers smoking as physically and socially correct compensation (eg growing interest extracurricular activities sports, social activities, etc.).
- the content of education against smoking abstinence education can not take place in a lecture, but includes a series of seminars, discussions and practical skills training, with the theme:
 1. health consequences of smoking, with special emphasis on short-term and cosmetic variations. In children and adolescents is not recommended overemphasize long-term health consequences of smoking, children are seen as remote and unreal; knowledge of these effects, however, children can apply appropriate adult smokers in your family, neighborhood
 2. economic consequences of smoking
 3. social impacts of smokers and non-smokers in the circle of friends, families, partners, the media
 4. smoking is normal, discusses the prevailing incidence of non-smokers in the population trends in smoking in developed countries, social disadvantage smokers
 5. cigarette refusal skills training in different ways, their practical use in specific situations
 6. practicing relaxation techniques and schemes for practical solutions to common situations when it is necessary to resist smoking
 7. debate on the rights of non-smokers (live and move in a clean environment) and the rights of smokers (to be informed about the consequences of smoking and be supported in their efforts to stop smoking).

- project duration antismoking education: the school children in the 6 to 9 classes is given as a minimum of 2 blocks of 5 years in various discussions in this age group; optimum is 10 lessons in each year of schooling in 6 to 9 class
- the age of the target group of children for which they were not yet prepared and verified abstinence education projects. Abroad, meanwhile processed and validated methodology for children older school age, ie prepubertal and pubertal period. Programs can be suitably modified for younger and older age groups, in

- older children is recommended inclusion of lessons on the topic of smoking cessation for groups of regular smokers.
- involvement natural leader class into active participation in the project can greatly increase the effectiveness of educational activities. This peer (Eng. peer) with natural authority may assist the teacher/tutor in preparing the program, encouraging debate, acting in roles in skills training, can also run the program or its part. Choosing cooperating pupil should be carefully considered so that the selected student with a positive impact on preventive classmates in school and beyond. The primary responsibility for the conduct of the program remains entirely on the teacher/tutor.
 - involvement of parents is very important support educational programs. In an indirect form is performed so that parents are informed about the school project and asked for direct cooperation, which may consist of common watch TV programs with antismoking themes, in the debate on anti-smoking lessons discussed in school, parental involvement in homework with antismoking theme, and so on. Parents - smokers should be well aware of the health damage to children who are exposed to involuntary smoking.
 - the training of teachers and trainers involved in the abstinence education programs in addition to the necessary passion and desire to be involved in this issue is absolutely necessary. The trainer must not only have the expertise to enable it to deal successfully with discussion on all topics, but also practical skills in experimental activities, such as role plays in solving model situations, practicing refusal cigarettes, cooperation with leading disciple.

Training of teachers and trainers, respecting the needs of the necessary motivation and helps to increase the effectiveness of the program. Adequately instructed and very personally motivated teacher is the key to the success of the program.

Schools that choose to implement education programs to abstinence or to broader projects involving complex lifestyle should prominently include these projects into their curriculum. The decision that the school adopts a program of education for smoking, should be well considered in order to obtain the necessary support. The effectiveness of the program is necessary to check and evaluate public inquiry such as the tracking pupils' attitudes and behavior in the near and distant future.

Developed countries have recognized the importance of personal model of doctors and teachers for their patients and students. In many of them, the frequency of smokers in these two occupations significantly lower than the general population. In programs aimed at creating healthy schools and workplaces smoke-free is applied democratic principle of equal rights and responsibilities of all, ie. that the smoking ban applies not only to students, but also teachers and other staff in the building, respectively. campus. Some schools even manufacturing and medical facilities are set up special smoking room smoking employees to protect non-smokers from exposure to secondhand smoke. Smokers are gradually getting into social isolation, because smoking is the norm of the majority.

Positive effect on the cigarettes in addition to preventive approaches can also help substitutions. For there are dependent pharmacological preparations of nicotine, such as gum and patches, which are available in several versions (according to dose size). They represent an adjunct to other therapeutic activities to facilitate smoking cessation and require training before using expert (doctor, pharmacist). Psychotherapy, group and family therapy, self-monitoring, support partner, as well as some non-traditional methods (acupuncture, acupressure), stereotype change of life, habits, relaxation techniques are also included in the treatment regimen.

Now closer to mention the selected groups of illegal drugs, symptoms and risks of possible abuse and first aid.

Opiates

In medicine, they are used to control various kinds of pain and to stop diarrhea if there is insufficient other treatments. Some are served to control coughing.

Opiate addicts are searched for inducing calm, blissful period of "nirvana", bliss, depression. It is also consumed as a "range" for relaxing after misuse of stimulus funds. It comprises entirely natural substances (opium-clouded milky juice of unripe poppy, time darkening the air, morphine, codeine), semisynthetic ("enhanced" natural)-and fully synthetic heroin, which was to suppress and keep the addictive ingredient analgesic (strong painkillers).

Possible abuse of opiates is accompanied pupil appearance as a pinhead (note: they are also narrowed in diabetes, insecticide poisoning, stroke), senile expression, increased sweating, salivation, respiratory mucus, nausea, emaciation, tremors, apathy, lying, fear, depression, suicidal tendencies, hallucinations, is also a frequent criminal activities.

Opiates can be abused by injection into a vein, into a muscle, under the skin, snorting, smoking and inhalation.

Intoxication: very serious, life-threatening condition - call ambulance, until the patient monitor, care for his vital functions (respiration and circulation). Some opiates strongly inhibits the respiratory center (eg morphine) can cause an allergic reaction and shock-like state.

Cannabis products (marijuana, hashish)

Hemp products are used in the manufacture of paper, rope, textiles, oil, or eat the seeds can be used as birdseed. In medicine, the pure active substance of cannabis began to apply to control side effects (nausea, vomiting) chemotherapy for cancer, treatment of some diseases of the central nervous system and glaucoma.

Exploits the dried pulp cannabis (marijuana), its resin (hashish) or concentrated extract (hashish oil). After the application appears unbridled hilarity, talkativeness, growing willingness networking (including sexual). Man is "a mockery." Immediately after consuming cannabis users with reddened eyes appear noticeably swollen eyelids, cough similar to asthma during the bout, hunger ("sweet tooth"), dilated pupils, agitation, typical smell of burning potato tops.

Cannabinoids can be abused smoking (pipes, cigarettes), chewing, use in infusions, food, in combination with other substances (eg, hallucinogens).

Hemp products (especially then their smoking) are possible gateway drug (gateway drug) in adolescents. There is a high risk of transition to other substances, eventually. Marijuana remains the drug additive (to her to add other types of drugs).

Risk of abuse of cannabis is often underestimated. In addition, there is a risk of lung cancer, especially when combined tobacco and marijuana smoking.

Smoking marijuana causes a large decrease in vital capacity, chronic inflammation of the lungs and bronchial tubes, possible changes in terms of pre-tissue tumor to tumor formation (lung, oral cavity, pharynx, esophagus), abnormal menstrual cycle, harm to the fetus during pregnancy, infertility in both sex, decreased immunity, impaired ability to perform any complex activity (driving, working crane, machine control...)-applies to any form of income-cannabinoids in the body and can damage the genetic information transfer with negative changes in subsequent generations. Further deterioration occurs výbavnosti attention and memory, stupor higher feelings and emotional ties, mental disorder, flashback (at some point returns to the state, what was experienced under the influence of drugs, even if a person for a long time does not use any drug, is a "clean").

Intoxication: careful not require special treatment, just a quiet environment, constant supervision until handover to parents or legal guardians. Intoxication with psychiatric disorders and heavier intoxication level they require medical assistance or transportation RZP. When finding ingestion of foods with THC will try to induce vomiting, provide basic life functions, call RZP. It is always required constant supervision until handover doctor.

Sedatives, hypnotics, analgesics, anxiolytics, spasmolytics (drugs depressants)

At therapeutic doses, these drugs are used in medicine to induce sleep, to calm down, to suppress fear, pain, cramps and muscle relaxants.

They can be abused but also to induce feelings of euphoric mood, stimulating, pleasurable excitement, alertness, vigilance and paradoxically increased activity. Other times they are consumed on the "range", relaxing after stimulants are not available opiates (heroin). It comprises as a pure substance as well as drugs which are used in mixtures.

Longer accompany abuse: initial increased activity and talkativeness, and later sedation, drowsiness, emotional instability, impaired concentration, slow reaction (eg hazard in industry and transport), memory and intellect, apathy, inability to hold prior obligations and operations, loss of ties with the immediate surroundings, weight loss, motor disorders, frequent falls and speech disorders. There is the activity of digestive disorders and urinary system slowdown in pregnancy fetal development.

They can be abused usually as tablets, swallowed by mouth. They may also occur as drops, injections or suppositories.

Severe intoxication with coma may occur even after a 5-10-fold therapeutic dose. Particularly dangerous in this respect barbiturates, where poisoning may end fatally. It is necessary to watch these drugs if they are prescribed by a doctor and avoid their combination with other substances (such as alcohol) and self-medication. In case of prolonged abuse of drugs can not be planted once, because the risk of epileptic seizure disorders mental balance and failure of vital functions.

When finding intoxication care for breathing and blood circulation, provide supervision, call ambulance. If patient is conscious, we try to induce vomiting in order to remove residues of drugs from the stomach.

Cocaine

Cocaine is sought to stimulate physical and mental functions with verbosity and a sense of heightened sexual performance (business environment, "golden youth," erotic services). After a quick euphoria followed by depression and moods with anxiety, requiring another dose of the drug. Long-term abuse leads to strong feelings of depression, antisocial behavior and aggression, self-harm and the risk of suicidal behavior.

In medicine has found cocaine as a local anesthetic in ophthalmology and otorhinolaryngology, is replaced by less hazardous substances.

The active substance, cocaine is extracted from the leaves of the coca shrub (especially in South America). Used either as such or in the form of crack (Czech means thunder), when mixed cocaine, sodium bicarbonate (baking soda), water and everything melt. Smoking crack works in just a few seconds, it is more addictive.

Symptoms suggestive of cocaine abuse: euphoria, auditory, visual and especially tactile hallucinations (sensation of insects crawling on the body or under the skin, incl. Fact that handicap insects and "sees"), agitation, anxiety and aggression, dilated pupils, rapid pulse, chest pain suggestive of angina pectoris attack, sometimes the incidence of myocardial infarction (within minutes or hours during use), chills, fever, chills, nausea, vomiting, fever, seizures, conditions of collapse with respiratory arrest, there is inflammation of the heart muscle (infarction).

For long-term cocaine abuse is a significant change in personality characteristics, self-injury, insomnia, eating disorders, weight loss, tremors, impotence, inflammation of the nasal mucosa to nasal septum perforation (when snorting), fetal damage in pregnant women.

Cocaine can abuse snorting, smoking, dropping the nose, drinking the solution, but also intravenous injection.

When providing first aid we cool cool compresses, or showering, take care of vital signs, and left unattended. We call ambulance.

Stimulants - drugs with budivým effect (except cocaine)

Stimulants are sought for its "exhilarating" effect, as the pick. This group includes caffeine, amphetamine and its derivatives (methamphetamine), ephedrine, some anorectics (drugs dampening excessive appetite). At the intersection between stimulants and hallucinogens is the disco drugs (Ecstasy, Adam, Eve). Number of substances manufactured illegally from medicaments.

In medicine, some substances used in the treatment of otherwise instable obesity, low pressure, narcolepsy (uncontrollable falling into sleep).

After the abuse occur: increased alertness, wakefulness, faster psychomotor speed, power increase at the expense of quality, euphoric mood, the need for communication, sometimes aggressive behavior and self-injury, visual and auditory hallucinations, slur, rapid, unintelligible speech (to logorrhoea - waterfall, stream words), dilated pupils, rapid pulse, headache, hyperthermia, increased sweating, dry mouth, rapid breathing, increased urination in smaller doses, tremors, similar to epileptic episodes, possible heart failure with the onset of myocardial infarction, stroke risk with deaths.

Prolonged abuse of stimulants causes dehydration, emaciation, rashes on the face like acne, frequent bronchitis, headache, dizziness, increased heart rate, damage to the vascular system and a number of internal organs, slurred (vague, drmolivou, fast, heavily understandable) speech, some possibility of damage to the

fetus during pregnancy, infections from unsterile drug use, recurring hallucinations, anxiety, confusion, agitation, feelings of persecution development ("prosecute").

Stimulants abuse can usually intravenous, intramuscular or subcutaneous injection, feeding by mouth, snorted. They are applied initially by snorting or drinking solution soon transferred to the administration of intravenous route (weekend users), then the regular supply. When it is not possible to use a vein, returning users to the oral application, event. combine it with injections outside the vascular system.

First aid for overdose with disorders of consciousness: the patient cool, patrolling vital functions, required constant supervision, control pulse, resp. blood pressure (if possible). Calling ambulance.

Hallucinogens

To this group belong such as LSD, a substance contained in mushrooms (magic mushrooms) and plants (cacti) and in some animal sources (toad skin), phencyclidine (PCP, "angel dust"), the so-called "designer drugs" (disco drugs) - have stimulant properties and hallucinogens are manufactured synthetically. Hallucinogens are abused to induce altered sensory perception, hallucinations, another view of time, space and oneself. In combination with exciting component are also toning and stimulating effect, then used as the drugs mainly disco and dancing at parties.

Medically were served some hallucinogens (LSD) controlled in psychiatry, the patient gained preview of his illness, was how critical suggestible and treatment, as well as to alleviate its internal tensions and could tell you what's bothering him. After application of hallucinogens observed dilated pupils, flushing, rapid heartbeat, sweating, tremor, dizziness, dry mouth, nausea, marked sensory disturbances, euphoria, anxiety, and sometimes depression, overestimation of their own abilities, disturbance of judgment, delusions, feelings' "fragmented personality".

Hallucinogens may cause:

- so-called "bad trip", bad experience, when there are significant changes in perception, anxiety, insight into your own personality and surroundings, visual and auditory hallucinations and body accentuates the fear of going mad-permanent fear of the abuse drugs, the influence of anxiety may occur aggression against oneself and surroundings
- persistent belief that pathological experiences are real, even if the abuse is not under the acute influence of drugs
- mood disorders
- flashback - rediscovery (after days, months), the experience of intoxication after the drug is not ingested, usually takes a few seconds, it may be felt subjectively pleasant or unpleasant (anxiety), alcohol, marijuana, stimulants and hallucinogens are able to provoke a state of mutually
- paranoia, "prosecute" - feelings of persecution, spying, eavesdropping.

The consequences of long-term abuse of hallucinogens: superficiality meeting, called amotivational syndrome (loss of life motivation, value scale, goals), and discusses the possible impact on the chromosomes, which can lead to damage to human genetic information also can damage the fetus and spontaneous abortions

(clearer evidence is however, lifestyle changes abusive in combination with other risks, such as infections), provocation covertly ongoing mental illness.

When abuse "classical" hallucinogens (LSD) were not reported fatal complications, but the situation is different with "designer" drug-Ecstasy (Ecstasy, Adam, Eve). Only one tablet in susceptible individuals damage the kidneys and their subsequent failure, severe dehydration, coma and death. Furthermore, there is overheating (temperature performs up to 40 °C), unquenchable thirst (drink more than 10 liters of fluid) unrest. Ongoing severe changes in vital organs (heart, liver, pituitary, other areas of the central nervous system) and the vascular wall.

Abuses hallucinogens:

First of all are taken orally (by mouth) such as tablets, capsules, trips (taped squares of paper about the size of a postage stamp), teas, decoctions, dishes. Rarely, tablets or suppositories introduce into the rectum, or the tablets have dissolved and applied to intravenous injection. Some hallucinogens can also smoke, sniff.

Intoxication with symptoms of excitement, agitation, disturbances of perception, thinking, anxiety and the possibility of self-harm or suicidal behavior you notice the expansion of the affected pupils, fever, rapid pulse, breathing disorders (risk of collateral), seizures resembling epileptic seizure.

We call ambulance, reducing (if necessary) the temperature of cooling using tiles, wraps, showering with lukewarm water, take care of vital signs and always provide supervision until the doctor.

Organic solvents and inhalants

Advantage of the fine chemicals and paints, varnishes, adhesives, solvents, cleaners, fuels. Many substances found use in industrial chemical and pharmaceutical production, sewage, in medicine as anesthetics, drug ingredients, household and hobby.

Symptoms *dostavující* is immediately during application: euphoria, increased self-confidence, increase perceived mental and physical strength, visual and auditory hallucinations, constricted consciousness, sometimes agitation, anxiety, headache, nausea. Altered state of consciousness can take up to 12 hours, followed by fatigue and sleep. When sniffing can lead to sudden death, among other things due to heart rhythm disturbances, reflex respiratory arrest, but also changes the behavior of intoxicated (drowning, falls, traffic accidents).

Long-term consequences of abuse: accidents, self-harm, disability nasal and oral mucosa and skin around the mouth and nose, conjunctival inflammation, prolonged fever with bleeding from the nose and chronic bronchitis with cough, increased salivation, shaking hands, damage to internal organs, peripheral nervous system and central, possible seizures, impaired fertility, truncated higher feelings, emotivity disorders, visual and auditory hallucinations. Regular long-term sniffing (generally two years or longer) causes disturbances in work capacity, severing family and partner relationships, unemployment, wandering, disorders arise intellect, attention, memory, personality degradation.

Abuse is inhalation (sniffing) vapor or gas, mostly in adolescents in a group, the substance is also poured onto a handkerchief, washcloth, towel, pillow, cotton and inhale or sniff directly from the spray, pour into a pan, gently warms and breathes again. Initially smells 1-2x a week, then every other day and every day. Sniffing period is from several minutes to several hours. Unable to maintain control

over dosage, as is often veiled consciousness and may fall to the material impregnated cloth or plastic bag suffocation dragged over his head.

First Aid: arrange fresh air immediately interrupt operation volatiles takes off clothes soaked, release airways. The patient is placed in a warm environment, provide hydration and minerals. We call ambulance, we monitor vital signs and provide supervision.

Anabolic steroid hormones

They are exploited for rapid and massive increase muscle mass and decrease fatigue. Constitute a prohibited doping for athletes and popular products in fitness centers (fitness, gyms, gym-studios, clubs).

Dosage for abuse of 20-200 x exceeds the usual therapeutic dose (in medicine administered on the advice of doctors in hormonal disorders, against muscle atrophy and bone in patients long-term bedridden for better healing of fractures, etc.).

The effect of anabolic steroids: stimulating growth of skeletal muscles, reduce fatigue, changes in mood (euphoria, insomnia, "motivation"), availability to aggressive behavior, sometimes to brutality without remorse, sexual dysfunction, mental disorders.

On their long abuse can highlight: disorders of sexual development disorders in adult sexuality, reduction of seed, liver disorders (cancer in danger, severe bleeding), coronary heart, personality changes and growth aggression, stop growth, weakening immunity.

Method of abuse: taking tablets or capsules by mouth, injection containing hormones intramuscular.

When providing first aid victim calm, constant supervision to ensure the arrival of doctors, watch vital functions.

Laxatives

They are available in disorders of discharge or deliberate emptying at a certain time. It is always advisable to consult with your doctor or pharmacist as spontaneous, gratuitous and prolonged dosing may lead to severe psychological and physical dependence, ending a long internal, and sometimes surgery. Even death is not entirely unique.

The laxatives usually not the right psychoactive effect, but the effect on the intestinal wall and the vegetative nervous system and its reflex loops. Eventually, the victim can not without several times higher doses normally empty. Abuse of laxatives (in the form of tablets, capsules, drops, suppositories) is highly socially tolerated.

Beside these drugs may also meet with the addictive behavior that is also able to induce different mechanisms of addiction. It is a pathological gambling, dependence on different social groups and their rituals (sectarianism), dependence on work, success, good social status (workaholism), deliberate overeating to induce delicious feelings, rejection of tension and stress. Such behavior always aims to alleviate internal tensions, weakening or displacement of discomfort. According to some studies occur in the body to produce endorphins in the central nervous system, and this is explained by the desire to repeat the addictive behavior and the risk of

addiction. Endorphins are the brain under physiological circumstances, and as a protection against the perception of pain in the threat, both rewards and evoke feelings of well-being after physical or mental activity (sports performance, food, sex, successfully solved the problem). If the player hits a fine balance formation and degradation of endorphins stimulus from the outside, there is a time dependence on the repetition of these stimuli and blunts the physiological mechanism of formation of endorphins.

According to some authors, is the cause of addictive behavior, when there is no direct encounter with any "tangible" substance, also called concept of "virtual drugs" (eg computer games, internet, TV, nomophobia=no mobile phone phobia, etc.).

Pathological gambling

Pathological gambling usually mean repetitive playing (gambling) games that continues and often increases its frequency despite adverse consequences in terms of psychological and social. In our country there are more types of gambling (eg, card, roulette, sports betting, craps, "shell"), however, remain the most common slot machines. In a broader sense, we included in this category as those that are not associated with a direct financial winnings or losses, but gradually the players occupy free time, divert him from important obligations, acts on his mental and physical condition.

Depending on the game, a very inconspicuous. Its origins can be based eg computer games whose content presents an inappropriate value. Similarly, unilateral commitment of students to play the "amusement machines" also led to the loss of time involved in learning and in particular to a certain isolation and lack of social contacts. Since unilateral passion for working with computers, interest in video games, playing the slot machine goes a small step to move towards winning machines. Career morbid player proceeds in several stages, which represent (according to Nespor, 1994):

1. Phase of wins (dreams of big profits, easy wealth, a number of possible wins, false optimism, "pink eye"),
2. Phase of losing (period losses, attempts to regulate and control the game, event. put an end to it, borrowing money, hiding gambling before family and loved ones, the inability to repay debts, neglect of family, employment, education and other obligations, the possible criminal offenses in order to obtain means to play),
3. Phase of desperation (damage to reputation, lawsuits, penalties, alienation from family and friends, panic, blame the neighborhood of his failure, possible tendency to suicide, divorce, inclination to another addictive behavior and substance).

Among the experiments with the game and the development of pathological gambling expires variously long time. In adults it usually approximately three years, in children and adolescents less (weeks or months). The process of recovery from pathological gambling proceeds in several stages (according to Nespor, 1994):

1. Stage of criticality (seeking help, getting hopes to return from fantasy to reality, sense of responsibility, termination gambling, value chain restaurants and past social ties).

2. Stage of re-creation (debt, plans to life, damages, knowledge of self, self-esteem back, trust of family and friends, return of peace, reconciliation, addressing the consequences of the previous period).
3. Stage of growth (leaving thoughts on the game, an adequate response to life situations, understanding oneself and the surroundings, the higher the ability of human emotions and aid).

General principles for the provision of first aid for suspected abuse of addictive substances - summary:

1. isolate the victim from other classmates (neighborhood, class)
2. behave calmly, we will slow and silent conversation with disabilities
3. if necessary, give a simple and clear instructions
4. arrange plenty of fluids (unless injury to internal organs, especially abdominal) pain, blurred consciousness
5. not let get cold (only for cocaine, hallucinogens, stimulants, and some can gently lower the body temperature when overheating)
6. we prevent possible injury and self-harm
7. preventing further consumption of drugs
8. do not keep the patient never alone, even temporarily, always provide supervision for the arrival ambulance, identifying an escort for a trip to the doctor (including transportation to the hospital), in mild cases where intoxication wears off themselves, highlight the need for supervision parents or legal guardians of the child
9. we try to forcibly restrict patient, this rarely performed in cases of uncontrollable agitation until the arrival ambulance
10. addict easiest to recognize among pupils in acute poisoning with hallucinations, seizure states, coma, sometimes with a disruption of vital functions. Handle the situation is to be as damaging health requiring first aid corresponding to the state affected him and call ambulance. When you call we'll show that this is a likely drug poisoning, if available, provide rest or contaminated drugs from her. If patient vomits, we provide the first portion of vomit, in which is the highest concentration of toxic substances.

General risks of drugs which can be smoked:

1. loss of protection against infection and foreign material in the lungs
2. slowdown or complete cessation of self-cleaning mechanism of the respiratory tract infections and the growth of the organism in this area
3. frequent chronic bronchitis and increased risk of emphysema (popping fine vesicles and lung alveoli, their coalescing in larger cavities, loss of active breathing space, limiting gas exchange, choking)
4. neoplastic diseases of the respiratory, urinary, digestive, reproductive and other organ systems.

General risks of drugs administered by injection:

1. higher probability of severe poisoning (overdose), because the concentration thus administered drug in the blood rapidly growing
2. possibility of infection in the body and its distribution within the organism (threatened heart, brain, liver, kidneys, etc.)

3. the possibility of transmission of viral jaundice (hepatitis), especially types B and C, AIDS
4. formation of purulent deposits at the site and elsewhere in the body, the devastation of the venous system with edema and blueing limbs (persists for several years after discontinuation of the drug, sometimes permanently), please type defects after, especially in the forearm, wrist, arm, thighs, shins, buttocks, abdomen with poor skin cover and deep ulcers with necrotic tissue (subcutaneous tissue, muscle)
5. pulmonary embolism (vmetení material into the pulmonary artery, pulmonary circulation, elimination of work), a very serious accident, life-threatening - it may be a blood clot, air, insoluble components injected drugs, fat globules, etc.
6. possible poisoning additives that have been used in the manufacture of drugs (phosphorus and iodine in methamphetamine), or to be added to the drug to its dilution ("cut", "settings") in order to increase volume and profit vendor (usually starch, lactose, dried milk, but also plaster, detergents, powder ...).

Overview of the situation in the Czech Republic

General comment

The current situation in the Czech Republic is quite complex and confusing. The second half of the 90th years were characterized by gradual disintegration of the original junkies community, producing Czech "traditional" drugs (such as "meth" or "braun"-a mixture of opiates usually type of codeine) in the small and distributing them in narrow and targeted groups. Some of these groups were broken up by police, others made professionalization including exports of drugs to Western markets (or export specialists "cookers"). On the other hand, in the released area heavily infiltrated drug-dealing mafia connected to abroad. It caters mainly heroin, meth producers retreat creates a space for the dissemination of cocaine (but not for our population is too expensive). Ever-growing clientele consumers of hard drugs, illegally imported from abroad. Drug-dealing mafia has the advantage that our country has in the past served as a transit territory, nowadays only on the transit joining local consumers. They are often recruited from the ranks of the so-called youppies, youths, earning various financial transactions quickly and having a lot of money on interest intense relaxation, even with drugs. Here that the main consumers especially cocaine and crack (in Western countries is drug crack unemployed youth in difficult social situations).

Among adolescents, since primary school, appearing sniffing (sniffer), abusive various solvents. Their popularity is increasing, especially among children from poorer social relationships (easy availability and relatively low cost, legal elusiveness).

Generally, there is a decrease in age at first contact with the drug, from year to year was recorded in 1996-1998 multiple dependent increase in clients under the age of fifteen years in state and non-governmental organizations, taking time regularly using drugs before inducing a state where it is necessary to find help is in this age group about three years. Nevertheless, experiments with illegal drugs in the primary school sparse affairs, their frequency increases in the second stage and culminates in high school, when the independent study correspond to about 40% at least occasional drinkers marijuana. In old age the frequency of drug experimentation and regular use of drugs gradually decreases.

The media constantly reports about offering sweets and other treats containing hard drugs distributed to children for free when you narkomafie perhaps it thus generate future clients. The last "hit" in this area are color prints (such as are in some chewing gum), impregnated heroin, which is sufficiently absorbed by the baby's skin. These "guaranteed" information have not been for our country officially confirmed. But the tide is evidenced by LSD, distributed in the form of small (about 0.5 x 0.5 cm) squares of paper saturated with this compound. Most pictures are printed with attractive heroes of cartoons, comic books, etc., and various symbols. There is also a "disco drugs" (Ecstasy, MDMA, etc.), combining stimulant and mild hallucinogenic effect. Under the influence of fatigue disappear and consumers discos dance the whole day (not excluding death from exhaustion or dehydration), subjectively perceive music intensely and blend with the surrounding crowd (techno-party).

Some specificity of our drug addicts is quite frequent drug injection into a vein. Blame for apparently carries previously expanded illegal intravenous soluble tablets of certain drugs when other drugs can be difficult to obtain. No exception addicts who are starting flat with intravenous drugs. By contrast, in the western states intravenous drug use is seen as something final and déclassé even local heroin addicts snort for an extended period and the transition to injection is generally considered as indicative of the final decline. On the other hand, only in the end of 1992 were identified among our addicts first HIV positive people. The prevalence of HIV positivity is also currently relatively low, which may present an advantage in a well maintained pre-emptive action. More among our addicts are different types of viral hepatitis, not only due to the transfer of intravenous administration (particularly hepatitis B and D), but also for their general low level of hygiene (hepatitis A and C).

Abuse of certain drugs, such as morphine and the like is more a matter of those who have access to them, ie. mainly medical and pharmaceutical workers.

Further discussion is led by the so-called soft and hard drugs. The Amendment Act (in force since 1 January 1999) is initially intended to distinguish. Thanks to the intervention of some unqualified "activists" but was changed to its original version, not the resolution again. It is appropriate to note that the vast majority of division according to the "hardness criteria" are based alcohol and tobacco as worse than marijuana. According to earlier legal standards, was punishable by a person who somehow tampered with illegal drugs (purchase, sale, supply, manufacture, export, import, transport, aiding ...), but not the user, if committed other crimes, but only "was under the influence." Today's legislation also introduces the concept of "amount of a drug is greater than small" for the possession of which may already be a citizen affected, even when they claim that it has for its own use. Expression of this amount was the subject of much discussion among experts and the general public, approximately only are some of the data in Table No. 5.

Table No. 5: The maximum amount of drug still considered to be small for the selected substances (approximate figures) Adapted from Krmencik, 2002 and Binding Instruction of the Police President No. 39/1998

Substance	The maximum amount of drug still considered to be small
Heroin	10 doses, one of 100 mg, the active substance concentration to 30%
Cocaine hydrochloride	10 doses, one of 50 mg
Amphetamine	10 doses, one of 50 mg
Methamphetamine (meth)	10 doses, one of 50 mg
MDMA (Ecstasy)	10 doses, one of 100 mg
LSD	10 doses (trips), one of 50 µg
Marijuana	20 marijuana cigarettes (joints) containing 1.5% of the active substance (delta-9-THC)

Current information

To create a better understanding of the current situation among problem substance users cite for news Hygiene and Epidemiology Service and its website aimed at drug epidemiology (Polanecky et al., 2002).

Stabilized database medical and contact (M/C) centers is included at the end of 2001 a total of 234 facilities, most were represented outpatient clinics and drop-in centers. The highest yield reached a drop-in centers, whose services are sought on average more than 31 clients in one device.

The total number of newly registered clients M/C centers in the country for the year 2001 amounted to 4,233 persons, ie 41.2 per 100 thousand inhabitants. This is the highest annual incidence of problem drug users from the start of national drug monitoring in 1995.

Most represented group of drugs, a drug indicated as an essential remain stimulants (a total of 2,023 persons, ie 47.8% of all users). In second place are newly registered users of heroin and other opiates (1,213 persons, 28.7%).

The most affected age group remain 15-19 years old, which was recorded in 1763, ie 41.6% of all drug addicts - This group prevails to methamphetamine. The second largest age group is 20-24-year old (1498, 35.4%), mainly heroin users. Injecting drug use as the most common method of drug use was reported in 2636 cases (62.3%). Absolutely the highest numbers of injecting drug users are in a group of 20 24-year olds.

Daily use of the drug indicates the 1255 newly registered drug users, other 1326 indicates consumed in the frequency of two to six times a week, which means that almost 2,600 newly registered addicts is primarily used heroin and methamphetamine almost daily.

Interested parties may need drug epidemiological data to compare themselves if they follow the ESPAD website (eg online: <http://www.drnespor.eu>) and the Public Health Service of the Czech Republic (eg, online at: www.mzcr.cz, www.hshmp.cz). Good info sources are ie: www.drogy-info.cz, www.emcdda.org, www.unodc.org

Possibilities of prevention of substance abuse

The school is a very important part of drug prevention, based both in the overall direction life attitudes of pupils and develop their value chain and in targeted education against substance abuse. This area has suffered in times past considerable non conceptual approach, which appears, among other things, scaring unfounded. For many drugs are described in various manuals hangover symptoms and withdrawal syndromes occur only at the time of advanced addiction, the first experiments with drugs, this negative accompaniment often do not (thankfully often do not even look particularly intensely pleasant experience). The discrepancy between the data of health education and observed reality can lead to negativistic reaction, especially during puberty. There is no need to emphasize the existence terribly pleasant mood, or perceived pleasant hallucinations. In Western countries are being prepared. rather try to rely on previously constructed value system, in terms of - what I want to achieve in life, what I can and while drug contrary, what I take. Such a balance will ring clearly against drug addiction and can be used in the antidrug education build.

Drug education needs to be comprehensive, systematic and long-term concept. In primary and secondary schools were established place of drug coordinators (known drug prevention methodologists). Their expertise is superior drug coordinator district office. Especially in primary schools should be from drug education somehow strictly separated alcohol and anti-smoking education, both because of the much higher consumption of these drugs children, but also because, due to legal age limits for consumption (of alcohol and tobacco ban in 18), both of these drugs for children also illegal.

The school consists of three different types of teachers, holding in drug education somewhat different functions. The school management (director, agent, secretary, etc.) provide education for their line, essentially managerial manner, including meeting with school governing bodies, state and local governments, may also be involved in addressing the sponsors for financially demanding action.

Drugs coordinator should provide drug education in terms of technical content, for that purpose through various types of training.

Other teachers should collaborate with the other two and meet certain organizational and professional tasks. In addition, should participate in the total daily positive impact on students and be able to apply immediate opportunities for events that can be use to apply this education. Even those teachers deserve gradual training of at least the basic principles of drug education and drug coordinator would be kept informed about the current situation in the city, district place.

Drugs coordinator should be able to determine from time to time in the school situation. This can serve both questionnaires (there are special standardized questionnaires, when used properly, giving comparable results widely, some are made available at the Public Health Service, or the district drug coordinators can be found on the Internet), and it is necessary to use signals from individual classes, from parents, police, etc. The overall situation in the Czech Republic, although periodically mapped, but the results of this survey may not be to determine the situation at a

particular school practically useful. Standard questionnaires are suitable because they wrongly worded text can have on abstaining disincentive effects (if questions are raised by abstaining from them they feel unconcern about his person - "If you do not take the drugs, return the questionnaire blank").

When deterioration either in school or in the district should be made more intensive preventive activities. In this framework it is possible to get (free or buy - buy to let by sponsor) comprehensive programs. The highest efficiency programs are based on pupils' own activity - can be used as elements of art, drama, etc.

Table No. 6: A Brief Overview of effective and ineffective prevention strategies (According to Nessor, 1995)

Strategy	Effectiveness
Intimidation	Ineffective
Emotional appeals	Ineffective
Simple information	Ineffective
Offering better alternatives than alcohol or other addictive substances	Effective for groups at increased risk
Peer programs (pre-active participation of peers)	Effective at medium-risk groups
Prevention based on the cooperation of the various society components	Effective
Reducing the availability of drugs including alcohol	Effective if it is accompanied also by reducing demand
Treatment or alleviation of the consequences	Relatively effective, especially if they are provided on time

Education represent a special case of the so-called peer-programs (peer programs), when the auxiliary teachers become peers - students from the class, selected by natural authority in a group (eg using sociometric study). They cooperate with the main part of the lesson and the teacher leads a small group of students themselves (class will be split into smaller groups, separately addressing sub-tasks). Promising students who could work in peer-programs can train on some districts in the wider activities of the District Drug Coordinator. Elements-peer programs are classifiable from about fourth grade elementary school, full programs are generally designed for a second grade school and high school. As a teacher it is very inappropriate teacher from the school at which the event takes place. Children usually keep their distance before known teacher and do not appear as it was for the purpose of these programs is desirable. However, nothing prevents schools (at least in larger settlements) to agree with the anti-drugs coordinator in one school to organize peer-program or another similar activity to another school and her drug coordinator return to the first.

Generally have worst performance lectures by specialists, in principle, should assign only within broadly based campaign is the only significant drug action at school can have a paradoxical effect (increase pupils' interest in addictive substances). Just embarrassing is the evaluation of a few years ago fashion activities

of former drug addicts, respectively. celebrities who victoriously battled drug addiction (appears syndrome, "he did it, why would I be afraid of"). For several years preparing accreditation procedures for organizations that would step on a professional basis into a drug education. The reason was very professional and very volatile price level of services offered, including events with clearly negative effect. Accreditation should at least ensure that the activity will not be offered downright inappropriate.

As part of the resolution "Concept and drug policy program for the period 1998-2000" is a clear definition of drug policy coordination at central and local levels. The list of tasks to individual ministries especially the Ministry of Education was established introduction of "Minimum Preventive Programme" in each school facility and defining individual responsibilities of individual entities for its implementation. Its content is further detailed in the "Guide of Ministry of Education to the drugs" in the form of tasks for the council and the director of schools and school facilities.

Direct responsibility for the preparation and implementation of quality educational programs carry the heads of schools and school facilities. Minimum drug prevention program (minimum preventive program, MPP) is one of them. MPP schools are often incorporated into their educational strategies and process is mostly methodologists drug prevention. Other teachers were determined to cooperate with methodologist in implementing MPP in terms of school. The most common forms of cooperation include exchange of information obtained by observing pupils, organizing meetings with students, integrating sub-themes preventive education into thematic curricula with a subsequent diagnosis of learning outcomes, etc.

Leadership Czech schools are still considered to be the core knowledge-based events (lectures and discussions usually focused on drugs and its harmfulness). Greater importance is attributed to "actions" hedged external lecturers, but with questionable and short-term effect on the target group, with no lasting effect on attitudes rather passive audience participation. It can be concluded that the training of teachers and other educational staff, like their charges, in the primary prevention of substance abuse yet there are no signs of it and still prevail over the information-oriented methodological approaches.

Teachers, educators and trainers of vocational training are an important part in the structure of drug prevention. Their participation in the formation of MPP and familiarization with the requirements for it are unfortunately limited, which correspond to the ideas about the content MPP (discussions, lectures, video programs about drugs and their risks).

The MPP performs mostly following tasks:

- note the behavior of the pupils are interested in their problems
- classified the issue of drug prevention plans in thematic subjects, which are taught
- cooperate in organizing meetings, lectures, film screenings on the theme of drugs and their harmful effects
- participate in school events preventive
- deal with parents of pupils on educational issues
- creating new possibilities for free time students.

Educators believe that they are not very well prepared for the tasks in the field of drug prevention pupils, interested in the systematic training of this educational activity, and their professional and methodical. Educators consider the tasks

formulated in too general MPP and evaluation of their effectiveness is insufficient. For their successful performance in the field of drug prevention would be welcomed by the school management organization of courses, seminars, from methodologists expect current information on the drug scene, school, counseling and organizing lectures, debates about drug issues.

School leaders, methodologists drug prevention and the broader faculty consider most necessary activities in relation to the drug problem:

- knowledge of the symptoms of addiction, mastering simple techniques to detect the drug scene at school
- skills to use modern educational methods based on learning the students' personalities, the creation-reshaping their value orientation
- use peer (peer) programs in the field of drug prevention, methods of active social learning
- consistent interpretation of legislation (incorporating supplements for substance abuse systems to schools, reasoning sanctioning learner, ways of working with parents, police, counseling organizations, etc.).

There are signs of the end of drug dealers directly to schools, consisting primarily of high school and college, in some cases, a primary school second grade, but rather in the larger cities. According to the present results in the Brno was demonstrated that purposeful activity of the faculty can be achieved forced out of school.

Challenge, particularly in smaller towns, there are various entertainment events for youth and older school age children and adolescents, because it is often targeted by drug dealers. Ensure "clean" discos and clubs where there would be more consistent to guarantee end-dealers, it is very difficult, even for such activities as the organization calling parents and educators as well as drug experts. If school should local conditions for the establishment of pupil club, discos, etc., consistently secured against the distribution and use of drugs, it would mean for drug prevention much more than most expensive cycles lectures.

Some special situation is the existence of addict directly between pupils. Teacher are teetering between the two extremes. On the one hand, not allow the addict became admired (and followed) hero class, on the other hand, his team had concluded a total condemnation of the way back and demotivated towards abstinence. The addict himself, the teacher should act in the sense that, if possible, not pass to harder drugs and their intravenous administration, to recommend his consulting services, in more serious cases, together with a psychologist, doctor, police, anti-drugs coordinator, always with the family.

The fight against drugs in our country involves many governmental and non-governmental organizations. After the state line is mainly repressive forces, represented by the police and the judiciary. They are followed up and network equipment, where it is carried out by a court ordered rehab treatment (psychiatric hospital, prison medical facilities, etc.). The effectiveness of this system is small, the vast majority of drug addicts immediately after the release of drug abuse begins again.

Emancipation addict from addiction is quite difficult and almost impossible without the positive motivation (drugs are available in correctional facilities). Motivation comes after several years "fall to the bottom" (it is paradoxically higher success rates in drug addicts who take the drug for a long time and want to do away with them voluntarily). The first step is detoxification (ie fading acute poisoning,

decrease the drug concentration in the blood). For many drug detoxification is necessary, ie overcoming acute problems of abstinence (at worst stimulating agents when they can directly endanger the life, subjectively experienced very badly for opiates). In these phases is needed medical assistance to specialized departments, such as the detoxification center in Brno - Czernowitz, which opened in 1998 and belonging to the most modern in the country. Followed by rehabilitation and social rehabilitation of the patient, that it has taken out of pathological social ties and bonds induce positive. Besides the state authorities in this activity also contribute significantly non-governmental organizations. Effective method for the early rehabilitation is staying in the communities located outside large cities (avoiding contact with drug parties and dealers). A certain advantage of these communities is the involvement of abstinent drug addicts in their work, they are able to quickly identify any violation of abstinence during treatment. Man dependent on alcohol, nicotine and other drugs even after completion of treatment and rehabilitation can not be considered completely healthy. It will always be a permanent lifelong teetotaler at risk of contact with drug re-return to the pretreatment state. Must therefore be an emphasis on managing stressful stressful situations, assertiveness, spare activities (what to do instead of using drugs), art rejection.

For high-risk groups in relation to drugs are considered children from kindergarten through high school and some particularly earmarked population groups such as the Roma (gipsy) community, the homeless, the unemployed, prisoners, people providing paid sexual services businesses.

Prevention of drug addiction can be divided into several stages. We consider a primary measure, changing behavior, and human behavior and thinking so that they decided for a healthy, drug-free lifestyle, and he could relax without the use of addictive substances.

The primary prevention should begin soon for children to learn through age proportional to reject offered "gifts" from strangers, familiarize themselves with advertising tricks, build your own value system and positive motivation. Later, they can learn about the most common addiction, but in a way that they did not result in a desire for experimentation and adventure. Agreement, threats, pleas, promises, lectures without discussion on the educational methods are not as successful (see Fig. 6). Also reference to potential health risks in children is not up to date (and still do not feel it applies here strong personal immunity syndrome - "it happened to someone, but not me"). An efficient method of primary prevention is considered a good example in your own family, at school, at the doctor, a "clean" drug-free way of life and education for him (birthdays, meetings with friends can celebrate without alcohol and cigarettes, offer parents child "to taste" alcoholic beverages, no smoking home ...). To a healthy lifestyle is one motivation for activities that are better than drug use (physical activity, hobbies, clubs, self). A special chapter represent peer (peer) programs. The practice of primary prevention can succeed with seamless students and experimenters. The weekend users are already reduced and the possibility of regular users in the sense of "control" drugs not only do not seek help, but even reject it.

Secondary prevention involves identifying and solving the resulting substance abuse, thus removing substances from the body, dissipated acute intoxication, treatment and coping with withdrawal symptoms. This is done in specialized departments (ICU, ER) hospitals, clinics (psychiatry) and institutes are involved in the state and non-state devices. Detoxification method developed to overcome the

period when a person is in acute intoxication under the influence of drugs, has autoaggressive behavior is dangerous for environment and suffer symptoms of withdrawal syndrome. The detox detoxification can build, meaning a more comprehensive approach to addressing addiction, including assistance in integrating into society and rediscover their place in it.

Tertiary prevention deals with both minimizing the harmful impact of the actions and behavior of the addict to his person and to society, both social rehabilitation of people who have to re-learn to live in society.

Defining the scope of secondary and tertiary drug prevention can, according to some authors vary.

Equipment to help people at risk of drug can be classified also according to the so-called low-threshold and high threshold. Low-threshold to impose any special conditions for the adoption of client, is coming to visit any candidate "from the street". Other hand high threshold chosen among the candidates for admission according to certain criteria (eg, only clients with motivation abstinence, clients dependent on marijuana, etc.). They are also due to greater success.

Persons who can not be repeated successfully handle the desire for drugs, or people without motivation for abstinence, we can still reach out programs called "harm reduction". Man is no longer directly not try to make the transition to a "clean" lifestyle, but advised him to inject the drug in a pure state, preferably under sterile conditions and proven resources (distribution and exchange of needles, syringes, treatment of acute and chronic muscle damage , blood vessels, skin), we provide social care for the addict and his family. This is achieved by at least a partial reduction in the risk of sudden death, damage to the body, transmission of AIDS, viral hepatitis B and C and other diseases.

In the case of some drugs may impose the aboliční approach of drug addicts drugs sold legally, for a fraction of the price on the "black" market and supervises on their aseptic application. Although it does not solve the problem of addiction, however, reduces aggression addicts and their societal hazards. The condition is usually the output of anonymity addicts and their inclusion in the registers.

In Great Britain and some other Western countries, selected doctors "hopelessly" addicted clients and prescribe drugs as such. The motivation for these programs is due to the fact that drug problem "radiates" into abstaining population (eg HIV positive drug addicts, drug earning a prostitution). There is also a decrease in drug-related crime and only this fact alone usually exceeds the cost of these projects.

Another option is called "methadone program". Rank among opiate methadone is also addictive, but it can be given orally, and the effect lasts for 12-24 hours. Therefore, it can be used to manage opioid dependence, when addicts get rid of the fear of withdrawal symptoms, continuous forage for new benefits, allowing them to communicate with the social network, a return to family, partner, school, and work. Later you can apply a small maintenance dose, which sometimes can be discontinued and completely abstain.

Direct confrontation with a drug problem is serious, but should not be a source of sensation. It could be inferred from the reflection on the causes, possible solutions emerge and help. In today's hectic world and away from the "traditional" value chain, when there was a crisis in schools and families, is much needed deeper focus on comprehensive child rearing, close cooperation between schools and families, and interest in leisure activities for children. Children and adolescents, having problems with drugs, school or family often promise a remedy. The proper approach to such

individuals nicely captures the English term "tough love". Adults should make clear interest, warmth and willingness to help, but can be firm, uncompromising, purposeful.

Far better than a lecture and a statement certifying group work with children, the possibility of having them freely and express themselves freely, to discuss, to know how to defend and correct view retreat from wrong. Especially important is the ability to offer a suitable rejection drugs in different situations, which is useful to rehearse in model lessons that the child led to decide in real life the least risk.

The task of the teacher is inaccurate diagnosis of the disease, but early detection of unusual warning signs that indicate that something is wrong. And because parents and teachers know the children well, they will notice these changes and try to explain them.

The teacher himself may not always competently manage drug therapy problem (the approbation of something else), but may to its successful resolution significantly contribute, get in touch with family, psychologist, doctor, police officer, causing the child and accompany them for examination. It is highly desirable school cooperation with a number of governmental and non-governmental organizations, provided, however, that they should choose only those that guarantee the quality of service and (if required margin) reasonable prices. So, as everyone can not teach or heal without a valid certificate and diploma, are being considered for accreditation of these facilities, so that was verified and confirmed that they can perform the activity advertised. The teacher can contact the general practitioner, pediatrician, AT office (medical devices, dealing with alcoholism and other addictions), psychologist (pedagogical-psychological counseling), psychiatrist, contact centers for drug addiction. Scope of preventive, curative and rehabilitation activities depends on local and regional options.

School should always alert parents if it obtains a some specific information on the prevalence of drugs in the local area or in the circle their pupils. Once again we remind that the school alone can not solve the problem of a student who began abusing drugs. This is a matter for specialized professionals. It would never occur to give the teachers talk to pupils' parents in the sense that it "can handle themselves in the family." With the best will in the world it is practically impossible. Overview of procedures in selected cases related to drugs, is given in Table No. 7,

Good knowledge of basic rules of First Aid is required for normal work with children and adolescents in school and at extracurricular events venue. At least minimum knowledge about some key situations, it should handle each and its provision, where possible, is also required (and non sanctioned) Act. Therefore, we recommend attention to repeat the rules and procedure of cardiopulmonary resuscitation in shock.

Harmony of family background and school environment can help you find and fix desirable attitudes of children and adolescents for the prevention and drug-free way of life. The teacher plays the vital role in this process by encouraging positive action and personal example.

Table No. 7: Overview of procedures in selected cases related to drugs (adapted from publications Educators program against drug-prevention activities implemented in schools and educational institutions, ed Institute for Children and Youth, Czech Ministry of Education, Prague, 1999)

Event	Consideration	Method	More options
<p>SITUATION 1</p> <p>Finding "legal" substances in the pupil (eg alcohol, tobacco, medicaments, solvents)</p>	<ul style="list-style-type: none"> • drinking and smoking under the limit 18 years • medication under the supervision of your doctor/ pharmacist • abuse of volatile substances 	<ul style="list-style-type: none"> • the removal of substances • discussions with the student, consultation with the school psychologist, school counselor 	<ul style="list-style-type: none"> • inform parents or legal guardian • decisions information about the teaching staff • decisions on debate with coordinator for drug problems
<p>SITUATION 2</p> <p>Ownership of illicit substances by pupil</p>	<p>According to the amendment to Act No. 112/1998 Coll. Supplementing the Act No. 140/1961 and No. 200/1996, is prohibited to own more than a certain amount of drugs.</p> <ul style="list-style-type: none"> • teachers are not allowed to conduct investigations without the consent of the pupil, this is the only authorized police • is established reporting obligations 	<ul style="list-style-type: none"> • remove substance and either destroy it in the presence of a witness, or (if they are followed by other measures) kept in a safe place and make a record • reports written the case according to applicable directives school • discuss the case with the student, provide intervention school psychologist, educational consultant 	<ul style="list-style-type: none"> • inform parents or legal guardian • decisions information about the teaching staff • decisions on debate with coordinator for the drug problems • a decision on further cooperation with the police, welfare authorities
<p>SITUATION 3</p> <p>On-campus student is found under the influence of drugs or alcohol, or suffering from withdrawal symptoms</p>	<ul style="list-style-type: none"> • priority is to ensure the safety of the victim and the pupil area • teachers are not allowed to conduct investigations without the consent of the pupil, this is the only authorized police 	<ul style="list-style-type: none"> • follow the recommendations listed in MPP • to record about the case • discuss the case with the student, provide intervention school psychologist, educational consultant 	<ul style="list-style-type: none"> • inform parents or legal guardian • decisions information about the teaching staff • decisions on debate with coordinator for drug problems • a decision on further cooperation with the police, welfare authorities
<p>SITUATION 4</p> <p>Pupil caught when selling (dealing) drugs</p>	<ul style="list-style-type: none"> • illegal activity • threat to the moral education of children 	<ul style="list-style-type: none"> • remove substance and store in a safe place, to record • reports written the case according to applicable directives school • discuss the case with the student, provide intervention school psychologist, educational consultant 	<ul style="list-style-type: none"> • if appropriate, inform staff • contact the police • consider informing pupils

<p>SITUATION 5</p> <p>The school grounds were found drugs or equipment to use them</p>	<ul style="list-style-type: none"> • a problem with the safe disposal of infectious and toxic waste 	<ul style="list-style-type: none"> • provide safe storage for drugs or equipment until the police will be passed • to record the case 	<ul style="list-style-type: none"> • if appropriate, inform staff • contact the police • consider informing pupils
<p>SITUATION 6</p> <p>Pupil confides, to use addictive substances</p>	<ul style="list-style-type: none"> • due to their age may be considered a confidentiality 	<ul style="list-style-type: none"> • offer advice and support • consider the circumstances regarding confidentiality • if necessary, to establish cooperation with a psychologist, doctor, police, assemble a team 	<ul style="list-style-type: none"> • an appropriate form to inform the parents or legal guardian • if it benefits, contact Consulting Centre
<p>SITUATION 7</p> <p>The school finds that at its registered office can procure drugs</p>	<ul style="list-style-type: none"> • no defined legal responsibility schools outside its territory but there is a moral responsibility and a role of the school in the community setting 	<ul style="list-style-type: none"> • get into touch with local organizations (including the police), give them the necessary information • If appropriate, inform pupils • If appropriate, inform parents 	<ul style="list-style-type: none"> • provide school staff are well informed about the local situation and its relation to addictive substances
<p>SITUATION 8</p> <p>The parent (s) of the pupil shows (s) problems with addictive substances</p>	<ul style="list-style-type: none"> • teachers can provide appropriate information to organizations or workers in the field of social care, according to the seriousness of the case and the possible threat to the child 	<ul style="list-style-type: none"> • recommend parents to seek counseling • to offer the student the necessary information and support 	<ul style="list-style-type: none"> • consider if the pupil beneficial to refer his case advice
<p>SITUATION 9</p> <p>A parent at the school seeks advice on how to solve drug problems in their child</p>	<ul style="list-style-type: none"> • respecting the uniqueness of each case, including consideration of confidentiality, express tact, participation, support • make an offer necessary information according to specific needs 	<ul style="list-style-type: none"> • recommend parents to seek counseling 	<ul style="list-style-type: none"> • consider if the pupil beneficial to refer his case advice
<p>SITUATION 10</p> <p>School worker suffer from problems with addictive substances</p>	<ul style="list-style-type: none"> • legal solution is based on the provisions of the Labour Code and conditions of employment • show participation, tact, trying to help, but the problem not tolerate 	<ul style="list-style-type: none"> • recommend the worker to seek advice and assistance • clearly identify the shortcomings in his work • draw appropriate warning/disciplinary action 	<ul style="list-style-type: none"> • consider ways possible to help • identify the person to whom the case may also involve

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