



National Health *Promotion* Programme

MINISTRY OF HEALTH OF THE SLOVAK REPUBLIC
PUBLIC HEALTH AUTHORITY OF THE SLOVAK REPUBLIC



OBJECTIVE OF NATIONAL HEALTH PROMOTION PROGRAMME

(update in 2005)

The primary objective
of updated National Health Promotion Programme
is to initiate partnership of particular components
of society to provide support and improvement
of public health in order to achieve continuous
improvement in public health status

The Government of the SR took note of National Health Promotion Programme
by resolution No. 39/2005 adopted on 6th July 2005

*Health is the only value
respected by all ...*

(Latin proverb)

NATIONAL HEALTH PROMOTION PROGRAMME

Introduction

The value of the long-term programme of improving public health status in the Slovak Republic „Health for All in the 21st Century” lies in the fact that it represents a model of complex health prevention and health care and its improvement, which was developed according to current needs of medical fields including national health policy.¹⁾

Achieved results of prevention included in the projects and programmes of the National Health Promotion Programme were analyzed in the last period and submitted for talks in the Government of the SR and the National Council of the SR in 2004. The Report on Public Health Status in the Slovak Republic suggests a positive outcome of implementation of preventive programmes aimed at health promotion.

The summary of data from the Report on 2004 is found below.

No significant changes were noted in the structure of mortality stratified according to death causes. Five most common causes of death, i.e. cardiovascular diseases, cancer, external causes (accidents, intoxications, homicides, suicides etc.), respiratory diseases and diseases of digestive system resulted in 95% of all deaths. Cardiovascular diseases and cancer account quantitatively for the most important causes of death. Trends in mortality changes in the Slovak Republic are similar, to some degree, to those in the European Union.

In spite of a 3-year longer average life expectancy in male population noted in the last 15 years, the average life expectancy in male population of the Slovak Republic is relatively short, and markedly shorter than that in Western European countries. The average life expectancy in male population of the Slovak Republic and European Union is 70 and 75.5 years, respectively. The average life expectancy in female population of the Slovak Republic and European Union is 78 and 82 years, respectively.

Premature mortality in age category 0-64 years in the Slovak Republic was higher than that in the European Union. Premature mortality in male population in the Slovak Republic was almost twofold of average premature mortality in the European Union. Cardiovascular diseases, cancer and external causes (accidents) were responsible for that.

1) Report on Public Health Status is submitted to the Government of the SR on a regular basis, every 2 years. The last report was submitted for the period 2001-2002. It was adopted by Governmental Resolution No. 689 of July 7, 2004



A trend of mortality due to cardiovascular diseases in the whole Slovak population is sluggish (Graph 1).²⁾ The incidence of myocardial infarction is decreasing for all age categories, especially in males at productive age. The highest mortality due to cardiovascular diseases in both sexes at the age of 65 years and older was noted in southern and southeastern regions of the Slovak Republic. This also applies to cerebrovascular diseases, ischemic heart disease, and myocardial infarction.

A trend of age-specific mortality due to chronic heart diseases did not almost change in the whole population in the last three decades. An increase in mortality due to ischemic heart disease was noted only in subjects aged 75 years and older in the last decade. However, this should be ascribed to a change in coding of ischemic heart disease in favor of atherosclerosis (I70) in 1980s. An improvement (although minimal) in age-specific mortality due to cerebrovascular diseases was noted in all age categories, particularly in males in the last decade.

The National Cancer Registry did not notice any substantial changes in both structure and time trends of the progress of particular locations and types of malignant tumors when compared with the previous period. The most prevalent cancer types in males are as follows: lung, bronchial and tracheal cancer (15.9%), non-melanoma skin cancer (14.7%), colorectal cancer (14.4%), prostate cancer (9%), oral and oropharyngeal cancer (7%), gastric cancer (5.1%), bladder cancer (4.1%), renal cancer (3.5%), pancreatic cancer (2.8%), and laryngeal cancer (2.2%).

The most frequent cancer type in women (like previously) was breast cancer (17.6%) followed by skin cancer (16%), colorectal cancer (11.7%), endometrial cancer (6.6%), cervical cancer (5%), ovarian cancer (4.3%), lung cancer (3.2%), and pancreatic cancer. The structure and trend of cancer in men and women in the Slovak Republic are similar to those in the European Union.

It should be noted that despite unfavorable trends in cancer incidence and mortality (Graph 2)²⁾ among adults, the rate of newly diagnosed diseases in children (aged 0-15 years) did not change over the last 30 years. About 170 -180 new diseases were diagnosed annually, and this rate fell under 150 in the last years probably due to reduced birth rate in population.

Although public health status has improved in the Slovak Republic, we still markedly lag behind other countries of the European Union. Therefore, implementation of the National Health Promotion Programme is also needed in subsequent years. This programme is designed in a system of rapid response to actual health problems. The National Health Promotion Programme is also aimed at reduction of health risk factors that significantly influence the development of serious non-infectious diseases.

Objective of National Health Promotion Programme

The primary objective of updated National Health Promotion Programme (NHPP) is to initiate partnerships of particular components of society to provide support and improvement of public health in order to achieve continuous improvement in public health status.

Implementation of objectives

Implementation of the objectives of NHPP provides an intervention in a broader sense from governmental economic, social and health policy, including education up to intervention projects at all levels of society.

The National Health Promotion Programme is an integrated programme, where all governmental resorts, organs of state administration and local governments, non-governmental organizations, business segment and all other society parts (voluntary unions and other organizations) may become involved in.

A coordination with particular strategies of the World Health Organization and decisions of the European Parliament and Council are essential during provision of tasks arising from particular objectives of this programme. A coordination of the programme with the strategy of state health policy is important as well. The strategy of NHPP is based upon results of the monitoring of public health status in the Slovak Republic as well as upon public health awareness in the Slovak Republic.³⁾

Instruments for implementation of objectives

The projects which, based on identification and elimination of health risks, contribute to improvement of public health status serve as an instrument of implementation of particular objectives of NHPP.

According to importance of health risks, the projects of NHPP are implemented at national and regional levels. In view of evaluation of the impact of health risks, the projects are divided into short- and long- term projects. Long-term and short-term projects are planned for more than 5 years and 1-3 years, respectively.

The projects of NHPP are submitted according to actual call, and they are reviewed by an expert committee and approved by the Ministry of Health of the Slovak Republic based on submitted application. An expert committee is composed of representatives of particular resorts of the Government of the SR, which submits the projects to opponents, and advises it to the Ministry of Health of the Slovak Republic based on their reviews.

³⁾ Report on Public Health Awareness in the Slovak Republic for the period 2003-2004 is a part of particular objectives of this update. It is processed and published every 2 years.



The following criteria are considered in reviewing the proposals for project solutions:

- Contribution to improvement in public health status and awareness
- Continuation of the project with regard to actual objectives of NHPP
- Economic efficacy and transparency of the project
- Well defined measurability of objectives
- Quantified indicators
- Assessment of the health impact of the project
- Practical efficiency of project objectives
- Professional level of the project
- References of the applicant
- Project sustainability even after the end of financial support

The programme and projects of NHPP are coordinated by the Public Health Authority of the Slovak Republic. The Public Health Authority of the SR also assesses the health impact of the programme while using the methods of evaluation processes.⁴⁾

Communication

Provision of continuous communication with public including education is a component part of NHPP.

The aim of communication is to establish data flow system so that citizens have a free access to adequate and clear information that assists in a positive modification of their knowledge, attitudes and behavior with regard to their health.

All available means, i.e. media, electronic etc., should be used to provide communication with public.

Assessment

The efficacy and health impact of NHPP should be assessed every 5 years. The report should be submitted for approval to the Ministry of Health of the Slovak Republic, the Government of the SR and the National Council of the Slovak Republic.

⁴⁾ Evaluation of the impact is carried out using a WHO method „Health impact assessment“.

OBJECTIVES OF UPDATED NHPP

Objective #1: HEALTHY LIFESTYLE

This objective can be achieved by arranging conditions for improved lifestyle, so that citizens can improve the quality of their lives and assume responsibilities for their own health.

Objective definition: Lifestyle refers to subject's behavior resting upon the interaction of environmental conditions, personal characteristics, social factors and economic factors.

Current status: A healthy lifestyle serves as one of the priorities of this programme aiming at public education in health issues. By combining health education and effective health promotion strategy, one can achieve improvement in public health.

Public health awareness: The most recent survey of public health awareness and behavior in the Slovak Republic suggested that 78% of men and 72% women regarded their health status as good, and that women suffered from long-term diseases more than men. The most prevailing conditions in elderly men and women include cardiovascular diseases followed by cancer, while allergy predominates in a younger population. Sixty percent of respondents believe that their life expectancy can be modified by the way they live and care about their health. Ninety percent of respondents from all age categories reported indolence as the main cause of their unhealthy lifestyle.

Activities needed to accomplish this objective:

- Increase in the level of public awareness of selected health determinants
- Reduction of health inequality
- Assistance in lifelong education of selected population groups (risk groups) aimed at healthy lifestyle

Monitoring indicators:

- Monitoring of public health awareness
- Monitoring of selected health determinants:
 - Dietary habits
 - Physical activity
 - Mental health
 - Drug addiction



Objective #2: HEALTH CARE

Objective definition: Prevention as a component part of health care arises from the Act No. 576/2004 Coll. on Health care and services related to health care provision. Prevention belongs to a complex of working activities carried out by health care professionals.

Prevention arising from this legislation includes:

- training and education with a view to health protection maintenance or restoration
- active search for possible causes of diseases, their elimination and prevention of diseases
- search for pathological processes in their asymptomatic stages with treatment that can prevent their clinical presentation
- active monitoring of diseases with a view to prevent health deterioration

Current status: Adoption of a new health care legislation has caused a shift to individual health responsibility. In view of health development, effective prevention measures have yielded a greater benefit for public health and society than costs of curative medicine.

Public health awareness: The most recent survey of public health awareness and behavior in the Slovak Republic shows that in the age category 25-64 years, 78% of women and 56% of men took part in preventive check-ups in the last year. In a group of elderly (aged 65 years and older), 61% of men and 58% of women took part in preventive check-ups. Public health counselling centres were visited by 35,963 citizens in the last year.

Activities needed to accomplish this objective:

- Reinforcement and monitoring of efficacy of preventive programmes
- Increase in public awareness and education with a view to health protection, maintenance and restoration
- Maintenance of high standard of vaccination and preventive check-ups in childhood
- Reduction of health inequalities among communities ⁵⁾
- Assistance in individual counselling with regard to evidence-based healthy lifestyle

⁵⁾ Community refers to a population group which is characterized by common features, e.g. homeless people, marginal groups etc.

Monitoring indicators:

- Anthropological indicators of development in children and adolescents
- Number of health care assistants in selected communities
- Monitoring of the frequency of preventive check-ups
- Monitoring of the number and age structure of clients of counselling centres in the network of public health authorities
- Monitoring of public health awareness with a view to prevention

Objective #3: HEALTHY NUTRITION

Objective definition: Healthy nutrition and dietary habits are the mainstay of healthy lifestyle. The intake of particular nutrients has an impact on the incidence and development of most common non-infectious diseases.

Current status: Introduction of new dietary trends, established improper dietary habits and current food prices altogether increase the risk of the incidence and development of non-infectious diseases, particularly cardiovascular diseases and cancer. A current status in the Slovak Republic is characterized by low consumption of fruits, vegetables, milk and dairy products. In contrast, meat consumption is about 20% higher than recommended. Although food assortment has increased substantially in a last decade, accessibility to some vegetables and fruits remains an issue for socially weaker population groups.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, consumption of fish and fish products is very low, and none of the age categories approaches the optimal consumption in developed European countries. Nevertheless, consumption of poultry is relatively good in all three age categories, consumption of pork meat should be lower. Poultry is consumed daily or once-to-twice weekly by 72% of respondents from the age category of 15-24 years, by 80% of those from the age category of 25-64 years, and by 81% of those aged 65 years and older. In all three age categories, 2-4% of respondents do not consume poultry at all. Milk is relatively popular in all age categories, but consumption of cheese is lowest among individuals aged 65 years and older. A high price of the cheese products may play a significant role. Fresh vegetables are consumed once-to-twice weekly by 37-46% of respondents from all age categories. Fresh fruit is consumed daily, especially by younger respondents. Consumption of cooked vegetables (although only in 23%) prevails in individuals aged 65 years and older. Consumption of legumes is generally low and increases with age. Consumption of potatoes is lower in all age categories, while that of pastes is too high (68-73% of



respondents consume pastes daily or once-to-twice weekly). The daily consumption of sweet and sweetened beverages is excessively high in a younger age category (15-24 years old).

Activities needed to accomplish this objective:

- Population training and education aimed at improved dietary habits in all age categories
- Enforcement of the principles of healthy nutrition in public and school boarding
- Increase in public awareness of healthy foods
- Monitoring of population saturation with selected micro- and macro-nutrients
- Increase in calcium intake by consuming milk and dairy products, especially at schools
- Assistance in production of healthy foods
- Development of health promotion programmes with a view to improve education and awareness of both producers and consumers in this field
- Monitoring of the presence of extraneous substances in foods
- Monitoring of consumption of selected foods and dietary habits

Monitoring indicators:

- Population saturation with selected nutrients
- Trend of food consumption
- Monitoring of diseases related to improper dietary habits
- Monitoring of the quality of drinking water from own sources

Objective #4: REDUCTION OF DAMAGES DUE TO ALCOHOL, DRUGS AND TOBACCO PRODUCTS

Objective definition: The purpose of this objective is to reduce damages due to the use of alcohol, drugs and tobacco products.

Apart from social consequences, excessive use of alcohol increases the risk of injuries and non-infectious diseases (cancer, nervous, mental and many other conditions).

Apart from toxic effects, the use of drugs is also associated with serious social impacts, effects on mental health and a higher risk of some serious infectious conditions (AIDS, viral liver diseases etc.).

The use of tobacco products is associated with extensive public health damage especially due to increased incidence of cardiovascular diseases, respiratory diseases, and it accounts for one of the major causes of lung cancer and other malignant tumors.

Current status: The most recent study conducted in adult population suggests that daily smokers include mostly males aged 50-59 years,

workers and unemployed people. Women and subjects aged 60 years and older prevail in a non-smoker group of population. According to statistical data, the ratio of smokers and non-smokers in the Slovak Republic is as follows: 28% of respondents smoke daily, 13% of respondents smoke occasionally, and 59% of respondents do not smoke at all. The relationship between alcohol consumption and smoking in young people shows that amongst those admitting alcohol consumption 60% smoke daily, 20% smoke occasionally and 20% do not smoke at all.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, a higher consumption of beer, wine and spirits is seen among men. Alcohol consumption in women is stable and varies between 7-9%. Men consume mostly beer followed by spirits and wine. Consumption of spirits in the age category of 15-24 years is alarming as it is higher than that in the age category of 25-64 years. Consumption of spirits in women aged 15-24 years is evidently higher than that in other age categories.

The percentage of smoking men and women in the youngest age category is higher than that in subjects aged 65 years and older. In this age category, there is a minimal difference in smoking rate between boys and girls, when up to 52% spend their free time in smoky environment.

The use of drugs was highest among respondents from the youngest age category aged 15-24 years, especially among boys. The use of soft drugs was most prevalent. Among respondents aged 25 years and older, the most prevalent use of drugs was reported by subjects with basic education.

Activities needed to accomplish this objective:

- Implementation of preventive measures aimed at decreased consumption of tobacco products, alcohol and drugs
- Implementation of education programmes aimed at selected population groups
- Enhancement of professional capability in smoking prevention and weaning programmes in experts
- Increase in awareness of negative health impacts of drugs amongst children and adolescents
- Population education in the risks of alcohol consumption in recreational and leisure activities
- Conduction of alcohol and drug tests in employees as a part of a complex preventive programme, especially at high risk workplaces
- Education of parents and teachers in negative impacts of the use of drugs on health of children and adolescents
- Establishment of an information system aimed at the use of selected drugs



- Establishment and support of programmes aimed at harm reduction and reduction of the number of intravenous drug addicts

Monitoring indicators:

- Prevalence and incidence of drugs in selected population groups
- Consumption of tobacco products
- Alcohol consumption
- Efficacy of school preventive programmes aimed at training of social responsibility in relation to the use of drugs
- Monitoring of injuries associated with the use of alcohol
- Number of health facilities and other facilities providing treatment and counselling for subjects with drug problems

Objective #5: PREVENTION OF INJURIES

Objective definition: Reduction of the rate of injuries in all age categories.

Current status: Injuries account for a serious health, human and finally economic issue. Rescue service, treatment, rehabilitation including social benefits are associated with high financial costs. However, most injuries are foreseeable. Therefore, one should be focused on their prevention.

Accidents, intoxications and other consequences of external causes, including morbidity and mortality (hereinafter as “Injuries”) are the third most common cause of death. Injuries are the most common cause of death, disability and long-term sickness absence in the age category up to 45 years in the Slovak Republic. Injuries accounted for 38% of all deaths in the age category 0-44 years during a period 2001-2003.

Public health awareness: The most recent survey of public health awareness and behavior in the Slovak Republic was not focused on this topics. However, this topics will be included in the next survey owing to its topicality.

Activities needed to accomplish this objective:

- Improvement in monitoring of accidents and injuries
- Improvement in health monitoring system for identification of health determinants in the field of unintentional injuries and violence
- Development of collection system of relevant data on morbidity, disability and mortality due to unintentional injuries in selected age categories.
- Development of a method for verification of efficacy of preventive measures applied in the Slovak Republic at national and regional levels.

- Increase in scope of preventive, training and educational activities in prevention of injuries
- Monitoring indicators:*
- Incidence and mortality of injuries caused by other person
 - Monitoring of hospital admissions and treatment costs of injuries
 - Monitoring of costs related to social benefits for sick and disabled persons
 - Monitoring of hospital admissions and costs of injury treatment directly related to risk sports (mountaineering, ski alpinism etc.)

Objective #6: HEALTHY FAMILY

Objective definition: Arrangement of conditions for healthy and harmonic family development. Family health reflects a social and cultural level of each civilized country.

Current status: A harmonic family serves as a basis for healthy development of each individual. A healthy family raises healthy children serving as a basis for prosperous society. The birth rate is decreasing in the Slovak Republic. A negative rise in population was noted in the last 3 years. The age of primiparous women increases, and the rate of children born per one woman of childbearing potential decreases at the same time. This trend results in an increasing rate of postproductive population. An increasing number of children raised in incomplete families is another consequence of this trend.

Public health awareness: Based on the most recent survey of health awareness and behavior in Slovak school age population, the greatest interest was related to information about matrimony, parenthood, contraception, and the risk of drug addiction. The interest in this topics is followed by that in healthy nutrition in girls and environment in boys. School followed by family and media remain the most common source of information about a healthy lifestyle.

Activities needed to accomplish this objective:

- Education of pregnant women and parents in selected determinants of a healthy lifestyle
- Prevention of health risk factors in childhood
- Education to partnership and parenthood in selected communities
- Increase in efficacy of the system of training and education in health responsibility for all age categories
- Arrangement of conditions for family leisure activities
- Implementation of preventive measures aimed at healthy aging
- Training and education of families with disabled members
- Development of education-intervention programmes aimed at healthy lifestyle for Roma community



Monitoring indicators:

- Selected demographic indicators
- Monitoring of death causes in childhood
- Monitoring of quality of life at postproductive age
- Monitoring of paediatric morbidity with a special emphasize on congenital and non-infectious diseases
- Monitoring of the rate of risk pregnancies and low-birth-weight newborns
- Monitoring of the physical development of children and adolescents
- Monitoring of the lifestyle in selected age categories of population
- Monitoring of the number of facilities supporting healthy lifestyle
- Identification of risk locations in relation to public health

**Objective #7:
HEALTHY WORKING CONDITIONS**

Objective definition: Enforcement and adherence to the principles of healthy working conditions in large- and mid- scale enterprises.

Current status: In many cases, infrastructure in individual enterprises is not adequate. In particular, there is a lack of incentives on the part of state administration for the purpose of enforcement of health management, working conditions and safety. The enterprises in the European Union have increasingly made use of this strategy for its beneficial effect on enterprise productivity and on their own employees. Furthermore, it should be noted that insurance companies dealing with injuries can motivate employers with premium levels corresponding to working conditions and employees care. Thus, identification of the needs for provision of employee health promotion programmes in particular regions is important as well. Provision of tasks should be carried out in accordance with responsible resorts, particularly Ministry of Health and Ministry of Labor, Social Affairs and Family of the Slovak Republic.

Public health awareness:

Up to 49% of population at productive age are bothered by smoking at their workplaces.

Activities needed to accomplish the objective:

- Application of criteria and indicators for health protection and promotion
- Assistance in implementation of the system of protection management and health promotion at work and working safety including education in this topics
- Assistance in implementation of programmes aimed at reduction and prevention of absence from work due to occupational diseases
- Arrangement of proper psychosocial working conditions at all management levels

- Improvement in conditions for employees with regard to prevention of occupational diseases and excessive psychical workload in sectors with significant risk factors of work and working conditions (e.g. health care)
- Implementation of preventive and educational programmes aimed at employee health protection and promotion

Monitoring indicators:

- Monitoring of employee health status in selected industries and monitoring of the impact of negative environmental factors on employee health status
- Monitoring of the health status in health care professionals working in highly virulent and infectious environment

Objective #8: HEALTHY LIVING CONDITIONS

Objective definition: Continuous arrangement of healthy social, economic and environmental living conditions. Each individual has a right to live in environment that positively affects his/her health. Thus, regional health policy should be focused accordingly. Arrangements in relation to healthy housing should also be included in regional planning. Development and implementation of regional health policy is a component part of this programme.

Current status: The quality of household environment is an important component reflecting public health status. This fact is governed especially by the length of stay of persons in their households and formation of social links in this environment. Thus, not only the presence or the absence of chemical, biological, and physical risk factors, but also the impact of psychological and social factors is important. To accomplish this objective it is important to keep an eye out for the quality of household environment, development of skills of both individuals and families for the purpose of health protection and improvements thus contributing to reduction of the impact of health risk factors found in households.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, psychological discomfort increases both in working and household environments. The best psychological condition was noted in men aged 15-24 years when compared with other age categories. Frequent psychological discomfort may also be ascribed to uncertain social situation in many regions of the Slovak Republic.

Activities needed to accomplish this objective:

- Increase in awareness of the risks affecting health and contributing to creation of healthy environment



- Enforcement and expansion of positive influences and wholesome environmental activities
 - Development of an epidemiological study to evaluate eventual changes in public health determinants in selected locations
 - Assessment of the health impact of decisions
- Monitoring indicators:*
- Number of communities that have implemented assessment of the health impact of decisions
 - Number of regional environment and health action plans in the cities
 - Efficacy of activities aimed at improvement of healthy cities publicity at a regional level

Objective #9: REDUCTION OF THE INCIDENCE OF INFECTIOUS DISEASES

Objective definition: The primary purpose of this objective is to reduce the unfavorable consequences of infectious diseases using systemically realized programmes aimed at elimination or reduction of the incidence of infectious diseases that markedly affect public health.

The WHO objectives "Health 21 - Health for All in the 21st Century" are summarized in 5 tasks aimed at:

- maintenance of polio eradication in the European Region and complete eradication of polio in a global view
- maintenance of elimination of neonatal tetanus
- maintenance of elimination of measles
- reduction of the incidence of other serious infections preventable by vaccination (diphtheria, tetanus, whooping cough, haemophilus invasive infections, mumps, rubella, type B viral hepatitis)
- reduction of the incidence of other serious infections (HIV/AIDS, other sexually transmitted diseases and tuberculosis)

Current status:

In general, epidemiological situation in the Slovak Republic in 2003 can be regarded as favorable. The number of reported gastrointestinal infections in 2003 decreased or stayed at the same level as in 2002. A favorable trend of respiratory infections that are preventable by vaccination has been maintained.

Due to consistent compliance with Immunization Programme, currently there is a low incidence of infectious diseases in the Slovak Republic. Owing to high vaccination rates among children, polio and neonatal tetanus were eliminated as early as in 1960. The last case of diphtheria was reported in 1980. Morbidity is minimal with regard to

other infections addressed in Immunization Programme. A significant (31%) decrease in morbidity due to type B viral hepatitis was noted after introduction of regular, obligatory infant vaccination in 1998. The incidence of haemophilus invasive infections in 2002 fell by 47.6% after introduction of infant vaccination against haemophilus in 2000. One may conclude that these diseases serve as public health indicators, and it is our objective to maintain the favorable trend of their incidence.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, the rate of vaccination against influenza is very low. The highest vaccination rate was noted in subjects aged 65 years and older (45% of women and 44% of men were vaccinated). In the age category of 25-64 years, 60% of men and 64% of women have never been vaccinated against influenza.

Activities needed to accomplish this objective:

- Further adherence to objectives of “Action Plan to Maintain Polio Eradication” after polio eradication in the European Region including Slovak Republic in 2002 until global polio eradication
- Provision of regular obligatory vaccination of children and vaccination of adults against tetanus and further achievement of high vaccination rate
- Provision of regular obligatory vaccination of children against measles and epidemiological and laboratory investigation of each case suggestive of measles
- Achievement of high rate of pediatric vaccination against diphtheria, whooping cough, rubella, mumps, haemophilus invasive infections, type B viral hepatitis
- Reduction of the incidence and further dissemination of sexually transmitted diseases by means of health education

Monitoring indicators:

- Incidence of infectious diseases subject to surveillance
- Proportion of vaccinated out of all children subject to vaccination against tuberculosis, diphtheria, tetanus, whooping cough, haemophilus invasive infections, rubella, measles, mumps, type B viral hepatitis and polio
- Incidence and morbidity of HIV/AIDS and other sexually transmitted diseases
- Health educational activities aimed at HIV/AIDS prevention

Objective #10: REDUCTION OF THE INCIDENCE OF NON-INFECTIOUS DISEASES

Objective definition: The purpose of this objective is to reduce the incidence of non-infectious diseases and their consequences and to



minimize premature mortality due to chronic diseases. The most prevalent non-infectious conditions include cardiovascular diseases, cancer, diabetes mellitus, respiratory diseases, musculoskeletal diseases etc. To reduce the incidence of these conditions and their subsequent complications, health risk factors should be sought in environment and individual behavior and modified accordingly.

In view of mental health care, more attention should be paid to reduction of stimuli associated with mental diseases and enhanced prevention in mental health promotion.

Current status: Premature mortality in the age category of 0-64 years in the Slovak Republic was higher than that in EU countries. Male premature mortality in the Slovak Republic was almost twofold of average male premature mortality in the European Union. Higher premature mortality was mostly due to cardiovascular diseases, cancer and external causes (accidents and injuries).

A trend of mortality due to cardiovascular diseases has been stagnating in population. The incidence of myocardial infarction has decreased in all age categories, particularly among men at productive age. Mortality due to cardiovascular diseases in subjects aged 65 years and older is highest in southern and southeastern regions of the Slovak Republic. This applies both to cerebrovascular diseases, ischemic heart disease and myocardial infarction. The reason might lie in a permanently high consumption of animal fats in these regions.

A trend of cancer incidence in the Slovak Republic almost did not change in the last years.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, cardiovascular diseases followed by cancer are the most prevalent diseases both in men and women. Allergy prevails in a younger age category. Most people believe that their life expectancy can be modified by the way they live and care about their health. In general, the results show that with a higher education level there is a greater chance to modify lifestyle by an education. Up to 90% of respondents from all age categories reported indolence as the main reason for unhealthy lifestyle.

Activities needed to accomplish this objective:

- Prevention of ischemic heart disease and other cardiovascular diseases by consistent adherence to expert recommendations
- Activities to reduce the risk of cardiovascular diseases within primary prevention
- Conduction of periodic, epidemiological studies of the prevalence of most severe risk factors of cardiovascular diseases and cardiovascular morbidity
- Screening of selected cancer types (breast cancer, cervical cancer, colorectal cancer, lung cancer and skin cancer)

- Standardization of diagnostic and treatment procedures and their periodic update
- Improvement in rehabilitation conditions for cancer patients aimed not only at physical rehabilitation, but also at their possible inclusion in a working process consistent with their altered working abilities
- Quality enhancement of terminal care about cancer patients
- Public education in the role of regular and preventive oncological check-ups.
- Provision of coordination and efficacy of preventive mental health care. A shift from a previous care type to community-based mental health care. Inclusion of new approaches and forms in mental health care into pregraduate, postgraduate and continuous education systems and development of new programmes for health care providers, if necessary
- Monitoring of the incidence and prevalence of selected mental disorders
- Monitoring of depression and anxiety disorders
- Monitoring and meta-analysis of allergies in children and enforcement of preventive measures
- Individual education in dietary habits in relation to allergy
- Monitoring of the incidence and prevalence of osteoporosis
- Education in primary prevention of osteoporosis in childhood
- Development of education-interventional public programmes leading to higher awareness of risk factors involved in development of diabetes mellitus

Monitoring indicators

- Incidence, prevalence and mortality due to selected types of non-infectious diseases
- Number of subjects examined within a screening programme
- Rate of acute hospital admissions to coronary units and the rate of stroke
- Prevalence of the most serious risk factors
- Number of invasive cardiology interventions
- Number of cardiac surgery procedures

Objective #11: PHYSICAL ACTIVITY

Objective definition: The purpose of this objective is to achieve physical activity in most people and to advise on the most effective form of a physical activity, i.e. regular, dynamic, endurance activity for more than 30 minutes daily 4 - to 6-times a week.

Current status: A man is morphologically and functionally adapted to a lifestyle, where ability to cope with strenuous physical activity has



belonged to basic attributes of living and survival. Physical inactivity or sedentary lifestyle are associated with multiple health problems, which are the most commonly reported causes of chronic health disorders.

Public health awareness: Based on the most recent survey of public health awareness and behavior in the Slovak Republic, a very low physical activity was documented in population. The number of hours of physical activity rapidly decreases with age. Recreational sports prevail in younger age categories, while walking is predominant in older age categories. However, there is an alarming percent rate of respondents from all age categories, who are not involved in any physical activity exceeding 1 hour weekly. The number of overweight (28%) and first degree of obesity (9%) people increases accordingly.

Activities needed to accomplish this objective:

- Promotion of wholesome physical activity for selected population age groups
- Education-interventional counselling for individuals aimed at appropriate physical activities
- Expansion and enhanced efficacy of grouped physical activities aimed at prevention of selected non-infectious diseases
- Development of conditions for lifestyle modification aimed at enhanced physical activity
 - building local sports areas for various age categories
 - public access to sports areas
- Development of sports events aimed at public education in relation to physical activity
- Initiation of volunteers for the management and organization of grouped sports events for children

Monitoring indicators:

- Ability and performance of particular population groups
- Numbers of sports areas stratified according to type and utilization
- Monitoring of the impact of various physical activities on individual development and health
- Monitoring of the number of sports events for public, their accessibility, utilization and efficacy