

### IEGULDĪJUMS TAVĀ NĀKOTNĒ

Eiropas Savienības fondu darbības programmas "Izaugsme un nodarbinātība" 9.2.3.specifiskā atbalsta mērķa "Atbalstīt prioritāro (sirds un asinsvadu, onkoloģijas, perinatālā un neonatālā perioda un garīgās veselības) veselības jomu veselības tīklu attīstības vadlīniju un kvalitātes nodrošināšanas sistēmas izstrādi un ieviešanu, jo īpaši sociālās atstumtības un nabadzības riskam pakļauto iedzīvotāju veselības uzlabošanai" ietvaros īstenotā projekta "Veselības tīklu attīstības vadlīniju un kvalitātes nodrošināšanas sistēmas izstrāde un ieviešana prioritāro jomu ietvaros" **2.nodevums** – **a framework and recommendations for organizing, funding, and monitoring future health promotion activities and programs at the national level**.

## Reimbursable Advisory Services: Support to Develop a Health System Strategy for Priority Disease Areas in Latvia

#### **Health Promotion Review**

## 1. Background

Latvia is a small northern Central European country located at Baltic Sea and bordered by Estonia, Lithuania, Belarus and Russia. Total population is 2.05 million (2013). About one third of the population is living in Riga, the capital city, about 400, 000 in other eight cities, and the rest in 110 municipalities. The country is divided in six regions, Riga, having a population nearly one million, and five other regions. Two thirds of the population are living in urban areas and a quarter is 60 years or older. Latvia joined to European Union (EU) in 2004, together with the other two Baltic countries, Estonia and Lithuania. The currency is Euro (since 2014). Latvia is also the member of NATO. In the World Bank classification, Latvia is classified as a high income country having a gross national income per capita 22,970 USD (purchasing power adjusted).

The Latvia National Development Plan 2014-2020 (NAP2020) defines "economic breakthrough" as an ultimate target, which means welfare of all population in Latvia and facilitation of national sustainability. Three priorities are set as the basic principles of sustainable development: "Growth of national economy", "Human resilience" and "Growth in supported areas". Under the priority "Human resilience" a course of action "Healthy and Fit for Work" is set out, which sets out the measures for strengthening healthy and active lifestyle habits and development of health care system.

Since the new independence in 1991 Latvia has experienced gains in average life expectancy, but still lags behind its neighbors and other EU countries in terms of life expectancy at birth and perinatal and maternal mortality. Four main diseases areas have been identified in the Public Health Strategy for 2011-2017 and more recent Public Health Strategy 2014-2020 as the health sector's top priorities: cardiovascular disease (CVD), cancer, maternal and perinatal health, and mental health.

More recently, the Ministry of Health has announced a plan to make Latvia one of the healthiest nations in the World by 2065 by focusing on four pillars of the health reform: healthy food, addiction treatment, preventive healthcare, and physical activities. Health promotion activities and programs will play a critical role to help achieve the targets of the reform.

## 2. Objectives and organization of this review

Under the Reimbursable Advisory Services (RAS) agreement, the World Bank is providing a wide-ranging set of analytical services to support the National Health Service (NHS) of the Republic of Latvia in its efforts to reduce the burden of the four priority diseases areas.

More specifically, the World Bank aims to assist the National Health Services (NHS) to: (i) identify and quantify the importance of key health system bottlenecks, (ii) identify the underlying problems and causes of observed bottlenecks, and (iii) identify solutions and develop tools to drive their implementation.

As part of the RAS, the NHS together with the Ministry of Health of the Republic of Latvia (MoH) and the Latvian Center of Disease Prevention and Control (CDPC) have requested the World Bank Task Team to review its health promotion program with respect to the four main disease areas.

In particular, the Latvian government is interested in receiving an overall assessment of

- (i) the organizational structure of the Latvian health promotion program,
- (ii) the planned health promotion and disease prevention activities and
- (iii) its health promotion evaluation framework.

Regarding the planned health promotion activities in the areas of healthy diet, physical activity, mental health, sexual and reproductive health, breastfeeding promotion, injury prevention, prevention of infectious diseases and reduction in the use of addictive substances/activities, the Latvian government is interested in ascertaining whether these activities are the most appropriate measures to help tackle the disease burden from the priority disease areas in accordance with evidence on international best practices.

Similarly, it would also like to determine whether the proposed municipality evaluation framework is suitable given the experience in other countries and taking into account the issue of small sample sizes within Latvia's 119 municipalities. The government is particularly looking for specific examples, best practices, and materials/instruments focusing on "how to".

The review will be based on documents provided by the CDPC, which are:

- (i) health promotion policy in Latvia,
- (ii) planned activities during period 2014-2020 (part of Public Health Strategy for 2014-2020)
- (iii) criteria for assessment of health at local level, and Public Health Strategy for 2011-2017.

The review is organized as follows: section 3 outlines the analytical framework that will be followed to assess the Latvian health promotion program; section 4 provides an overview of available data and information on the country's disease burden; section 5 reviews evidence on international best practices for tackling this disease burden; section 6 assesses the different components of the Latvian health promotion program; section 7 provides a summary of findings and section 8 lists recommendations for improvement.

## 3. Analytical Framework

In order to evaluate the design of the Latvian health promotion program, the following key elements of the program will be examined:

- **Goals** Are the goals of the health promotion policy aligned with epidemiological data on the country's disease burden?
- *Institutional framework* Is there a clearly organized institutional framework for health promotion?
- *Target populations* are the appropriate populations being targeted by the health promotion program, including social exclusion groups?
- *Health promotion activities* Is there a comprehensive health promotion approach that is in line with international best practices?
- **Risk factors** Do the health promotion activities target the appropriate risk factors in line with the country's disease burden?
- **Evaluation framework** Is there a clear evaluation framework and have appropriate indicators been chosen both at the municipality and national level? Are different types of monitoring and evaluation approaches (including impact evaluation) being used?

In order to properly assess the goals and planned activities of the Latvian health promotion program, a thorough analysis of currently available data and information on (i) the disease burden (and levels of corresponding risk factors) and (ii) international best practices for health promotion must first be done. The findings of this analysis are presented in the following two sections.

# 4. What are the main contributors to the disease burden in Latvia which are critical to the health promotion program?

The Public Health Strategy for 2011-2017 identifies CVDs, cancers, mental health and maternal and child health as the four priority areas for health promotion. The following section reviews available data on these four disease areas, including levels of corresponding risk factors, and examines how Latvia compares to other countries in the EU.

#### (i) Cardiovascular disease and cancers

Ischemic heart disease is the leading cause of deaths, contributing one third (33%) of all deaths (2012), followed by stroke (15%), hypertensive heart disease (4.2%), diabetes (3.4%), lung cancer (3.4%) and colon and rectum cancers (2.5%) (WHO NCD Country Profiles). Among

females breast cancer is the most common type of cancer. Even though CVD mortality (age standardized) has been decreasing in the last ten years, it is still very high, 505 per 100,000 in men and 280 per 100,000 in women in 2012. Age standardized cancer mortality has been at relatively stable level since the beginning of 2000.

CVDs and diabetes are the most important cause of total disease burden, calculated in DALYs, followed by cancers, neuro-psychiatric conditions, other non-communicable diseases, and unintended injuries. In 2012, life expectancy at birth was 69 years among males and 79 years among females. The probability of dying before the age of 70 years, basically preventable mortality, is 61% in men and 31% in women. A quarter of all deaths between ages 30 and 70 years are due to four major non-communicable diseases (CVDs, cancers, chronic respiratory diseases and diabetes).

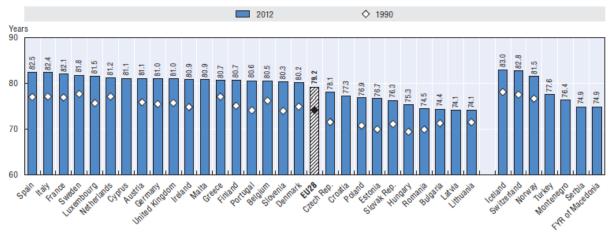
Age-standardized death rates Proportional mortality (% of total deaths, all ages, both sexes) Communicable 700 and nutritional males females age-standardized death rate per 100,000 600 500 Chronic respiratory diseases 400 300 200 Cancer 22% 100 58% 2000 2002 2004 2006 2008 2010 2012 Total deaths: 29,000 Chronic Respiratory Diseases NCDs are estimated to account for 93% of total deaths.

Figure 1. Age Standardized Death Rates, Latvia, 2012

Data source: WHO NCD Country Profiles

Among 35 European countries (28 EU and 7 other countries) life expectancy at birth in 2012 was shortest in Latvia (in men and in men and women combined) together with Lithuania. Latvian women had the fourth shortest life expectancy among the European women.

1.1.1. Life expectancy at birth, 1990 and 2012



Source: Eurostat Statistics Database completed with data from OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

In the table below, major contributors of disease burden in Latvia are compared with five other countries in the same region, the two Baltic neighbors Estonia and Lithuania, and three Nordic countries, Finland, Sweden and Denmark.

Table: Selected indicators of mortality in Latvia compared to five countries in the same region.

Health indicator	Life expectancy at birth (years), 2013		CVD mortality (per 100 000), 2012		Cancer mortality (per 100 000), 2012		Probability (%) of primordial death, 2012	
	men	women	men	women	men	women	men	women
Denmark	78	82	140	85	180	140	35	24
Estonia	71	81	395	200	210	100	53	24
Finland	78	84	200	100	130	85	34	18
Latvia	69	79	505	280	270	105	61	31
Lithuania	68	80	450	240	220	100	60	29
Sweden	80	84	170	105	130	100	26	18

Data source: WHO Country Profiles

Among the six countries in the Nordic-Baltic region Latvia has among males the second lowest life expectancy at birth and the lowest among females. Among males all Baltic countries has about ten years lower life expectancy compared to the Nordic neighbors. Among females the difference is smaller, between three and five years. In Baltic countries gender difference in life expectancy is 10-12 years compared to 4-6 years in the Nordic countries. Age-adjusted CVD mortality in Latvia is the highest among these six countries being two to three times higher compared to the Nordic countries. Cancer mortality is highest among males and second highest among females. Nearly two thirds (61%) of Latvian men and nearly one third (31%) of Latvian women do not reach the age of 70 years.

CVDs, cancer and other non-communicable diseases share a few common risk factors, namely tobacco smoking, unhealthy diet, insufficient physical activity and harmful alcohol consumption, and their physical and biological consequences such as obesity, high blood pressure, and serum cholesterol and glucose, which finally cause the clinical disease.

Also the levels of risk factors are high in Latvia. The table shows the levels of four risk factors – current tobacco smoking, total alcohol consumption, prevalence of raised blood pressure and prevalence of obesity – in six countries in the Nordic-Baltic region. Smoking among men is markedly more common in the Baltic countries compared to the Nordic counties. Nearly half of Latvian men are smokers. Among females the differences are smaller and among Latvian females smoking is at the same or even lower level then in the Nordic countries. Among males alcohol consumption is second highest in Latvia, after Lithuania. Raised blood pressure is more common in Baltic countries compared to the Nordic countries. Obesity is more common in the Baltic countries and in Finland than in Denmark and Sweden.

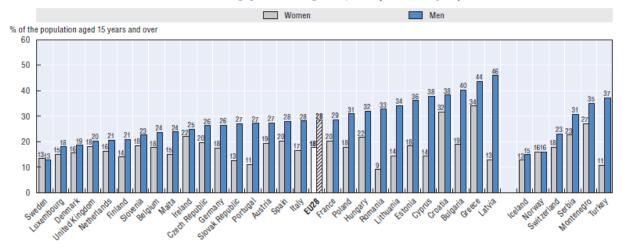
Table: Selected non-communicable disease risk factors in Latvia compared to five countries in the same region.

Risk factor	smoki	tobacco ng (%), 111	Alcohol consumption per capita (liters), 2010		Raised blood pressure (%), 2008		Obesity (%), 2008	
	men	women	men	women	men	women	men	women
Denmark	30	27	16.1	6.9	30.5	21.0	18.7	17.6
Estonia	43	21	16.2	5.3	50.6	43.0	20.9	20.4
Finland	27	20	17.5	7.3	38.9	30.3	23.3	22.8
Latvia	46	20	19.7	6.3	46.9	41.8	22.4	27.0
Lithuania	43	25	24.4	7.9	47.5	42.9	24.8	29.9
Sweden	25	24	12.9	5.5	34.9	26.8	19.9	17.3

Data source: WHO NCD Country Profiles

The figure below shows smoking prevalence among adults in 35 European countries. Among men, smoking prevalence is highest in Latvia. Among Latvian women, smoking prevalence is below the European average (OECD).

2.1.2. Gender gap in smoking rates, 2012 (or nearest year)



Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en completed with Eurostat Database (EHIS) and WHO Europe Health for All Database.

According to the Health Behavior among Latvian Adult Population 2012 survey, 52% of men and 17.6% of women are daily smokers, and in addition 5.5% of men and 3.6% of women smoke occasionally. In different data sources the prevalence of smoking vary to some extent but the main message is that smoking is very common among the Latvian males and the difference in smoking prevalence between males and females is larger than in most other countries.

The health hazards of smoking are well known. Smoking is a major cause of lung and many other cancers, CVDs, chronic respiratory diseases, diabetes, and many other diseases. Maternal smoking has a harmful effect on the health of new-born baby, and exposure to environmental tobacco smoke affects the health of non-smokers, both children and adults. Life expectancy among smokers is about 10 years shorter compared to the non-smokers, and over half of smokers will die from diseases caused by their smoking habit (Banks et al).

The positive news, however, is that after cessation of smoking the risk of diseases and death reduces markedly. CVD risk reduces within a few years, or maybe even during some months. Also the risk of cancer and chronic respiratory diseases reduces but it takes longer time, usually at least 5-10 years. Those smokers who quit at the age of 35 years have practically the same life expectancy with the never-smokers, and cessation of smoking reduces the risk at any age, even after 65 years (Doll et al, Mons et al). To reduce smoking rate, two approaches need to be implemented, prevent young people to start smoking and help smokers to stop. Prevention of starting of smoking in young people is an investment to the future, but the health results can mainly be seen in 20-30 years. Therefore, to reduce tobacco related morbidity and mortality in shorter term, during the next ten years, reduction of smoking through quitting is critical. Furthermore, adult smoking and attitudes towards smoking in the society are linked with smoking initiation among the young people.

Reduction of smoking is essential to improve health and reduce disease burden and mortality in Latvia. The main strategies to reduce smoking are: (1) Price and tax policy, (2) availability of

tobacco products (including the age limit for tobacco purchasing), (3) smoke-free environment, (4) ban of advertising and product promotion, (5) health warnings and plain packaging, (6) public information campaigns, and (7) support for smokers to stop smoking.

The WHO Framework Convention on Tobacco Control (WHO FCTC), the first global public health treaty, was developed in response to the globalization of the tobacco epidemic. It aims to tackle the causes of the epidemic, including complex factors with cross-border effects, such as trade liberalization and direct foreign investment, tobacco advertising, promotion and sponsorship beyond national borders, and illicit trade in tobacco products. It covers both demand-side and supply-side reduction measures. It notes the scientific evidence for the harm caused by tobacco, the threat posed by advertising and promotion, and illicit trade, and the need for cooperative action to tackle these problems. The convention notes also the role of civil society and the human rights. The Convention entered into force in 2005 and Latvia ratified treaty in the same year. There are currently 180 Parties to the Convention.

Association of European Cancer Leagues published in 2014 a comparative assessment of tobacco control policies in 34 countries in Europe (Joossens and Raw). Tobacco control policies of the countries were ranked based on the data on the implementation of different tobacco control activities. Latvia was ranked on 24th among the 34 countries included in the comparison. In the previous assessment in 2010, Latvia was placed as 17th, ie. Latvia's relative position in tobacco control has gone down in the past years.

Diet - particularly amount and type of consumed fat, salt (NaCl) intake, fruit and vegetable consumption and total energy intake – and physical activity are main behavioral determinants of obesity, high serum cholesterol level, high blood pressure and development of type 2 diabetes, and CVDs as their consequences. Data on diet and physical activity are relatively scarce but based on the Health Behavior among Latvian Adult Population 2012 survey, only a quarter of men and 38% of women are using vegetables (fresh or boiled) daily. Daily vegetable consumption was more common in Riga and other cities compared to rural areas. Most respondents (87.9% of women and 83.4% of men) used vegetable oil for food preparation. Margarine was used by 5.4% of men and 4.2% of women. Butter or products containing butter was used by 4.1% of women and 4.0% of men. Animal fat or lard was used by 1.5% of women and 2.0% of men. Butter was the most often used bread spread (48.1% of women and 39.7% of men) followed by low-fat (40-60% fat) margarine (27.8% of women and 32.7% of men). Data on objectively measured salt consumption are not available in Latvia at the moment.

According to the 2012 health behavior survey, 17.2% of men and 12.9% of women did strenuous physical activity (causing mild breathlessness or sweating) at least 30 minutes and at least 4-6 times a week during their leisure time. Physical activity decreases by age. The proportion of respondents reporting going to and from work on foot or by bicycle, which takes more than 30 minutes daily, was 19.5% for males and 23.8% for females. Sedentary behavior was common and nearly half (49.1% of men and 49.6% of women) spent their free time mainly reading or watching TV.

Data on overweight and obesity in Latvia is based on self-reported height and weight. According to the 2012 survey, about half (51.1% of men and 46.4% of women) were overweight or obese. The prevalence of obesity was not shown separately in the report but according to the WHO country profile about a quarter of population had were obese. Prevalence of overweight and obesity increased by age being less than 20% in the youngest age group (15-24 years) and over 70% in the oldest age group (55-64 years).

In general, the levels of all four main non-communicable disease risk factors — tobacco smoking, alcohol consumption, unhealthy diet and physical inactivity - are common in Latvia and need attention in the health promotion program. Population-based (measured) data on the prevalence of physical and biological risk factors, such as body mass index (BMI), blood pressure and blood lipid and glucose levels are not available in Latvia at the moment. Therefore, a new heath examination survey (HES) system needs to be established.

## (ii) Maternal and perinatal health

Total fertility rate in Latvia is 1.6 per women which means that the natural population growth rate is negative. In 2013, there were 22600 live births. Crude birth rate has decreased from 14.2 in 1990 to 9.8 per 1000 in 2012. Maternal mortality has markedly reduced in the last decades, from 57 in 1990 and to 13 per 100 000 live births in 2012, respectively. Maternal mortality rate in Latvia is at the same level with the Baltic neighbors but about two times higher than in the Nordic countries. However, due to small number of births in Latvia, the absolute number of maternal deaths is small (3 maternal deaths reported in 2013). In the same year, there were 112 neonatal deaths (The World Bank). In relation to the size of population, these figures are at the same level with Lithuania, but higher than in Estonia and the Nordic Countries. In interpretation of the figures, it should be noticed that that maternal and neonatal mortality in Nordic countries is lowest in the world. When compared to the countries of WHO European region, the Latvian figures are about the average level.

Infant (child under one) mortality rate in Latvia is 6.3 per 1000 live births, which is above the EU average (Figure below). The annual decline of infant mortality from 1970 to 2012 has been quite modest in Latvia. It should be noticed, however, that the baseline figure is from the time before the collapse of Soviet Union. When looking only the period of the new independence, the decline has been larger, from 20 per 1000 live births 1990 to 8 per 1000 live births in 2012 (WHO Country Profiles). The absolute number of infant deaths in Latvia was 159 in 2013 (The World Bank).

2012 (or nearest year) Decline 1970-2012 (or nearest year) Slovenia -4.4 Finland Luxembourg 2.61 Sweden -3.7 Czech Republic 2.6 -5.3 Italy 29 2.9 Greece Spain Austria -5.4 3 21 Germany Portugal Denmark -3.6 Cyprus France -4.2 Ireland -4.4 Estonia -4.1 Croatia Netherlands 3.8 Belgium Lithuania 4.0 EU28 United Kinadom -3.8 Poland -5.3 Hungary -51 Malta -4.0 5.3 Slovak Republic Latvia -2.6 Bulgaria -43 Iceland Norway Switzerland -3.8 -3.6 Montenegro Serbia FYR of Macedonia Turkey 10 5 0 -2 -4 -6 Deaths per 1 000 live births Average annual rate of decline (%)

1.8.1. Infant mortality rates, 2012 and decline 1970-2012

Source: Eurostat Statistics Database.

Comprehensive high quality maternal and child health care and delivery service is the main factor contributing to birth safety and wellbeing of the mothers and the newborn babies. All families, independent of income and socioeconomic position, should have the same opportunity to the use of the services. The services should also be proactive and able to identify families and mothers in risk, such as teen-age mothers, alcohol and drug users and those having chronic diseases, mental health problems or lack of permanent home, and help and monitor them as needed. Also prevention of maternal smoking, alcohol use and obesity would improve the health of both the mothers and their babies.

Even though the number of HIV infected mothers is small, their babies are in very high risk and need particular attention to prevent vertical transmission of HIV virus and other complications. For early detection of HIV infected mothers collaboration with social workers is needed. In general, the country needs to pay close attention to the HIV epidemic, which shows an alarming sign of increased new infections and diversified transmission channels.

#### (iii) Mental health

Mental health promotion refers to activities directly or indirectly related to the mental well-being component included in the WHO's definition of health: "A state of complete physical, mental and social well-being, and not merely the absence of disease". It is related to the

promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders.

In the WHO Mental Health Action Plan 2013-2020 the term "mental disorders" is used to denote a range of mental and behavioral disorders such as depression, bipolar affective disorder, schizophrenia, anxiety disorders, dementia, substance use disorders, intellectual disabilities, and developmental and behavioral disorders with onset usually occurring in childhood and adolescence, including autism. For dementia and substance use disorders, additional prevention strategies are described also in other documents (for example WHO report on dementia issued in early 2012 and in the Global Strategy to Reduce the Harmful Use of Alcohol). The action plan covers also suicide prevention. Mental disorders cause excess mortality, and in particular, they are a major contributor of total disease burden.

Determinants of mental health and mental disorders include not only individual attributes such as the ability to manage one's thoughts, emotions, behaviors and interactions with others, but also social, cultural, economic, political and environmental factors such as national policies, social protection, living standards, working conditions, and community social supports.

Exposure to adversity at a young age is an established preventable risk factor for mental disorders. Mental health promotion is closely linked with the social, economic, and cultural factors of the society. Our knowledge on the etiology and prevention of mental disorders vary between different disorders, and is often limited. For some disorders, such as schizophrenia, we do not know effective prevention yet, and in these conditions good care and treatment is the central issue. In some disorders, for example suicides, tools for effective targeted prevention are already available. There is also increasing evidence that healthy lifestyles can reduce the risk of dementia (Ngandu et al). Prevention of the use of alcohol and other addictive substances is important to improve the mental health and wellbeing in the society.

Suicide rates vary widely across the European countries. In general rates are lowest in southern and highest northern and eastern part of Europa (OECD). In 2011, the highest suicide rates were recorded in Lithuania, and Latvia was in the fourth position. However, even though suicide mortality in Latvia is still higher than in most other European countries, the development in the past years has been positive. In 2000, suicide mortality rate was 35 compared to 21 per 100 000 of population in 2011. In all countries, suicide mortality was much higher in men compared to women but in Latvia the gender difference was particularly large.

Age-standardised rates per 100 000 population

50

40

20

10

1.7.1. Suicide mortality rates, 2011

Source: Eurostat Statistics Database.

The relationship of suicide rate and the social and economic development of the society is complicated. For suicide prevention, the following factors have been shown to be effective: (1) adequate care of people having suicide attempts and helpline, (2) effective diagnosis and treatment of depression, and (3) prevention of harmful alcohol use and substance use.

A survey an addictive substance use among the Latvian general population has been conducted three times: in 2003, 2007 and 2012. An increase in illegal drug use was observed between 2003 and 2007 but in the last survey the use was at the same level with the figures ten years earlier. Among the general population aged 15 to 64 years, 14.3% had tried narcotic drugs during their lifetime, 4.4% had used drugs during the last year and 1.8% during the last month. However, there were marked differences in drug use between genders, age groups and the place of living: Half (51%) of young men (15 to 34 years) had tried the drugs during their lifetime.

Screening, diagnostic of diseases and health promotion within the health services:

Other factors contributing to high standardized death rates for these priority disease areas include poor financing for health and poor access to preventive, diagnostic and curative health services. For example, approximately one third of women first diagnosed with breast cancer and 55 percent of colorectal tumor diagnoses in 2012 were in Stages 3 or 4 (CDPC, 2013). Previous analyses have also shown that patient concern for and knowledge about how to safeguard their health through lifestyle choices (healthy diet, physical exercise, reduced use of addictive substances, etc.), available options for timely diagnosis and treatment, as well as knowledge regarding mental health disorders and sexual and reproductive health is inadequate (Ministry of Health of the Republic of Latvia, 2011). Moreover, utilization rates for primary care services are low, and physicians do not appear to address poor lifestyle choices when they do meet with patients (CDPC, 2012).

#### What is Health Promotion?

According to the European Action Plan for Strengthening Public Health Capacity and Services, endorsed by the WHO Regional Committee's Sixty-two session in 2012, health can be influenced by social and environmental determinants that interact across the life-course with genetics and behaviors. Health promotion takes a broad view of these determinants and builds on broad definitions of health and well-being. "Health promotion" and "disease prevention" are interconnected. In fact, health promotion activities have a positive influence on health-affecting behavior and health-supportive environments, which will indeed prevent disease.

Health promotion includes a wide range of activities, including: (i) the promotion of changes in lifestyle and behaviors and in environmental and societal conditions, in order to facilitate the development of a "culture of health and well-being" among individuals and the community and to maintain health; (ii) educational and social communication activities aimed at promoting healthy conditions, lifestyles, behavior and environments; (iii) reorientation of health services to develop care models that encourage health promotion; (iv) inter-sectoral partnerships for more effective health promotion activities; (v) assessment of the impact of public policies on health; (vi) risk communication; and (vii) awareness of and action on the social determinants of health and health equity.

Recognition of the influence of political, social, economic and cultural factors on life chances and on behavior at each stage of the life-course has led to an emphasis on equity and social justice, the distribution of social determinants of health, as well as inter-sectoral collaboration, in order to address the social and economic determinants of health.

Effectively addressing social determinants requires multi-stakeholder and multi-sectoral action across government and society. This includes strengthening capacity to govern for better health across sectors and implementing multi-stakeholder policies, services and systems. These need to engage citizens, service providers, civil society, the media, planners, policy-makers and politicians.

#### 5. What are some examples of international best practices for health promotion?

The following section reviews examples of international best practices that are relevant to the current state of Latvian's health promotion program. They depict a spectrum of framework and approaches as well as practice for setting up an effective health promotion program. They include (i) the Global Action Plan for Prevention and Control of non-communicable diseases, (ii) the "Health in all Policies" approach, (iii) tools for health and risk factor monitoring, (iv) the Western Australia Health Promotion Framework for Action, and (v) the North Karelia community-based health promotion project from Finland.

## (i) Global Action Plan for Prevention and Control of NCDs 2013-2020

The Global Action Plan by WHO provides a set of evidence-based measures for prevention and control of major non-communicable diseases and could be used as the framework for the health promotion program in Latvia. Objectives of the action plan are universal but the practical activities and targets need to be implemented within the country context.

Non-communicable diseases – mainly CVDs, cancers, chronic respiratory diseases and diabetes – are the biggest cause of death worldwide. More than 36 million people die annually from non-communicable diseases (63% of global deaths), including 14 million people who die too young before the age of 70. Most premature deaths are linked to common risk factors, namely tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol.

To strengthen national efforts to address the burden of non-communicable diseases, the 66th World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2020 (resolution WHA66.10). The overall goal of the action plan is to reduce the preventable and avoidable burden of morbidity, mortality and disability due to non-communicable diseases by means of multi-sectoral collaboration and cooperation at national, regional and global levels, so that populations reach the highest attainable standards of health and productivity at every age and those diseases are no longer a barrier to well-being or socioeconomic development.

## Objectives:

- 1. To raise the priority accorded to the prevention and control of non-communicable diseases in global, regional and national agendas and internationally agreed development goals, through strengthened international cooperation and advocacy.
- 2. To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of non-communicable diseases.
- 3. To reduce modifiable risk factors for non-communicable diseases and underlying social determinants through creation of health-promoting environments.
- 4. To strengthen and orient health systems to address the prevention and control of non-communicable diseases and the underlying social determinants through people-centred primary health care and universal health coverage.
- 5. To promote and support national capacity for high-quality research and development for the prevention and control of non-communicable diseases.
- 6. To monitor the trends and determinants of non-communicable diseases and evaluate progress in their prevention and control.

The action plan offers a paradigm shift by providing a road map and a menu of policy options for Member States, WHO, other UN organizations and intergovernmental organizations, NGOs and the private sector which, when implemented collectively between 2013 and 2020, will

attain 9 voluntary global targets listed below, including that of a 25% relative reduction in premature mortality from non-communicable diseases by 2025.

#### Targets:

- 1. A 25% relative reduction in the overall mortality from CVDs, cancer, diabetes, or chronic respiratory diseases
- 2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context
- 3. A 10% relative reduction in prevalence of insufficient physical activity
- 4. A 30% relative reduction in mean population intake of salt/sodium
- 5. A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years
- 6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances
- 7. Halt the rise in diabetes and obesity
- 8. At least 50% of eligible people receive drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes
- 9. An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major non-communicable diseases in both public and private facilities

Development of achievements in these nine target areas will be monitored by using 25 indicators.

#### (ii) Health in all policies – the need for multi-sectoral action

Most of the determinants of non-communicable diseases and their risk factors lie outside of the control of the health sector. Health sector alone cannot adequately prevent and control major non-communicable diseases. Health behavior, such as tobacco smoking, alcohol drinking, eating and physical activity are neither only individual decisions but strongly related to social, cultural, economic and physical environment. Therefore, multi-sectoral action and collaboration is needed to create enabling environments, so that healthy choices are the preferable and easy choices for individuals, families and all members of the society. To achieve this, action is required in number of domains, such as agriculture, education, trade and urban planning.

The WHO declaration of Alma-Ata in 1978 was the first formal acknowledgement of the intersectoral action for health. The issue was carried forward in the Ottawa Charter for Health Promotion in 1986, which recognizes "healthy public policies" as a key area for health promotion. These principles of inter-sectoral action for health have been reinforced in subsequent WHO global health conferences including the Rio Political Declaration on Social Determinants of Health (2011) and the Helsinki Statement on Health in All policies (2013). Intersectoral action is also stressed in the Political Declaration of UN High-level meeting of the General Assembly of the Prevention and Control of non-communicable diseases. The UN Political declaration called countries to develop multi-sectoral national policies and plans by the

end of 2013. In Europe, EU has a unique mandate and obligation to protect the health of the citizens. Health in All policies was the principal health theme of the Finnish Presidency of the European Union in 2006 aiming to highlight how and why the health dimensions can and should be taken into account across all government sectors (Ståhl et al).

Health is a core element in people's well-being and happiness. It is an important enabler and a prerequisite for a person's ability to reach his/her goals and aspirations, and to society to reach many of societal and economic goals. Health in all policies is an approach to public policies across sectors that systematically takes into account the health and health systems implications of decisions, seeks synergies and avoid harmful health impacts, in order to improve population health and health equity. It emphasizes the consequences of public policies on health determinants, and aims to improve the accountability of policy makers for health impacts at all levels of policy making.

Prevention and control of non-communicable diseases and their risk factors have a positive impact not only on health, but also on productivity and economic and social development, the main goals of the National Development Plan in Latvia. Furthermore, creation of health promoting environments is an effective tool to reduce socio-economic inequity in health. Examples of areas for multi-sectoral action to reduce the levels of major NCD risk factors are given in the table.

Table: Examples of areas for multi-sectoral action in non-communicable disease prevention

Sector	Tobacco use	Physical inactivity	Harmful use of alcohol	Unhealthy diet	Other (eg environment)
Health	✓	✓	✓	✓	✓
Education	✓	✓	✓	✓	
Finance	✓	✓	✓	✓	✓
Urban planning		✓	✓	✓	✓
Agriculture	✓		✓	✓	
Industry		✓	✓	✓	✓
Transport	✓	✓			✓
Environment		✓		✓	✓
Housing	✓	✓			
Justice/Security	✓	✓	✓		
Energy		✓			✓
Social/Welfare	✓	✓	✓	✓	✓
Sports	✓	✓	✓	✓	
Communication	✓	✓	✓	✓	✓
Legislature	✓	✓	✓	✓	✓
Trade	✓	✓	✓	✓	✓

Multi-sectoral collaboration between different ministries and other government organizations at national and local level is critical for successful non-communicable disease control and

prevention. However, government cannot tackle the disease burden alone. Participation of private sector and community organizations are also needed.

#### (iii) Health and risk factor monitoring

Continuous systematic monitoring of health behavior, biological risk factors and health outcomes is essential for successful health promotion and diseases prevention program. Depending on the country, data on health behavior is collected either by self-administered postal questionnaires or conducting an interview. In addition, internet-based tools can be used for data collection to complete the data, but internet cannot be the only tool for data collection. In addition to health behavior, surveys can include other questions, such as health-related knowledge and attitudes, perceived health, and use of health services. At the moment Latvia is conducting the following main health interview surveys (HIS): Global Youth Tobacco Surveys (GYTS), Global Adult Tobacco Survey (GATS), ESPAD and the Health Behavior among Latvian Adult Population Survey (the former FINBALT Survey). The last health behavior survey was conducted in 2012.

At the moment Latvia does not have any systematic and regular data collection system for assessment of the levels of biological risk factors in the population, in which clinical measurements and laboratory tests are needed. The following are two examples of internationally recognized health examination survey protocols.

## European Health Examination Survey (EHES)

EHES is a collaboration to collect nationally representative, high quality health data which are comparable between countries and over time. Data collection should cover at least the age group 25-64 years. Extending to the age group to people 65+ years is recommended. Sample should be nationally representative probability sample of at least 4000 people. Core measurements, which all countries should at least include, are: height, weight, waist circumference, blood pressure, total and HDL-cholesterol, fasting glucose or HbA1c and questionnaire(s). Countries can include additional measurements based on national needs, interests and resources. The EHES Manual is a European level master manual, which describes the European level standards for the national health examination surveys (Part A: Planning and preparation of the survey, Part B: Fieldwork procedures, Part C: European level collaboration and co-ordination) (http://www.ehes.info/manuals/EHES manual/EHES manual.htm)

Health examination survey (HES) is complementary to health interview survey (HIS) and administrative registers, which together form the basis for the health monitoring in the countries. It should also be noticed that the levels of risk factors in the population cannot be assessed based on data collected from the patients visiting health services.

## The WHO STEPwise approach to Surveillance (STEPS)

STEPS is an internationally recognized, standardized method for collecting, analyzing and disseminating data in WHO member countries. By using the same standardized questions and protocols, all countries can use STEPS information not only for monitoring within-country trends, but also for making comparisons across countries. The approach encourages the collection of small amounts of useful information on a regular and continuing basis (http://www.who.int/chp/steps/en/).

Standard WHO definitions for measuring the prevalence of tobacco use and alcohol consumption and internationally derived measures of physical activity are recommended. The questionnaires used in the core data set are simple and few in number and are not intended to give a complete picture of each behavior but rather to provide information on the population distribution of risk. The STEPS approach focuses on obtaining core data, at each level, on the established risk factors that determine the major disease burden. It is sufficiently flexible to allow each country to expand on the core variables and risk factors, and to incorporate optional modules related to local or regional interests.

The STEPS approach has three levels and within each level, risk factor assessment is divided into core, expanded, and optional modules. Step 1 contains as the core or "minimum set", self-report measures that all countries should obtain. In addition to socio-economic data, data on tobacco and alcohol use, some measure of nutritional status and physical inactivity are included as markers of current and future health status. Step 2 adds to Step 1 by the inclusion of simple physical measurements, such as height, weight, waist circumference, and blood pressure. Step 1 and Step 2 are desirable and appropriate for most developing countries. Step 3 includes Steps 1 and 2 and adds biochemical measurements. All the core items from Steps 1 and 2 can be readily assessed and are not made more complex if the expanded items are added. However, additional information at Step 3 is of a biochemical nature and requires access to the appropriate standardized laboratories. Collecting and analyzing blood samples is a relatively complex process and can be done only in the context of a comprehensive survey and in settings where appropriate resources are available. The addition of Step 3 can increase the cost and complexity of data collection.

## (iv) <u>Western Australia Framework for Action</u>

In its Health Promotion Strategic Framework 2012-2016, the government of Western Australia developed a framework for action outlining the different components of a comprehensive health promotion program as well as the potential actors who could take action and advocate. This framework recognizes that multiple interventions (or "levers") are required to target the underlying causes of chronic diseases. When implemented in isolation, the effect of each lever is reduced. In some cases, the interventions will only proceed successfully if one or more levers has been engaged first (Department of Health, Western Australia, 2012).

Levers and Actors	Examples
Healthy policies  Who can take action or advocate?  - Governments - Food and drink Industry - Organizations - Workplaces - Health professionals - Community groups - Schools - Health consumers and carers - Individuals	Integrate health considerations into government policy and planning across all relevant agencies (such as Departments of Planning, Education, Food and Agriculture).  Embed health considerations within the operational policies of organizations, workplaces and schools to support active transport, healthy eating, low risk alcohol use, and proper safety procedures.  Adopt flexible work policies to enable mothers to breastfeed.
Legislation and regulation  Who can take action or advocate?  - Governments - Organizations - Workplaces - Health professionals - Community groups - Health consumers and carers - Individuals	Support the enactment and enforcement of legislation to reduce chronic disease and injury, such as legislation to control tobacco and alcohol availability; promote road safety.  Develop and enforce laws and regulations which govern product safety, sales and marketing; clear contents labelling of consumable goods; laws to restrict access of potentially harmful goods to children.  Investigate regulatory methods to limit density of alcohol outlets in ways which support low risk alcohol use and do not support harmful alcohol use.
Economic interventions  Who can take action or advocate?  Governments  Organizations  Workplaces  Health professionals  Community groups  Schools  Health consumers and carers  Individuals	Provide financial incentives to encourage the establishment of health-promoting businesses (such as shops which sell fresh food) in areas which lack access/availability.  Create financial incentives to adopt healthy behaviors, for example by reforming taxation on alcohol so that the price of alcohol is increased, and lower strength drinks are more affordable than higher strength drinks.  Provide healthy food choices at competitive prices in canteens, tuck shops and at events.
Supportive environments  Who can take action or advocate?  - Governments - Community groups - Workplaces - Schools - Health professionals - Health consumers and carers	Provide neighborhoods with safe and connected footpaths and cycle ways, local amenity, public parks, playgrounds, facilities for physical activity, and adequate public transport.  Ensure that public, workplace, institutional, school and home environments are designed with safety and facilitation of health behaviors as priorities.

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- Individuals	Work with the food industry to increase the availability of smaller food and drink portion sizes and reduce salt, sugar, saturated fats and trans-fats in products.
	Limit the density of outlets selling tobacco or alcohol.
Public awareness and engagement	Develop public education campaigns designed to inform and support the community in modifying
Who can take action?	lifestyle behaviors.
<ul><li>Governments</li><li>Organizations</li></ul>	
- Workplaces	Influence professionals, organizations and policy-
- Health professionals	makers to incorporate consideration of health issues
- Schools	as part of their role.
- Health consumers and carers	Support health professionals in including brief
- Individuals	interventions as part of their routine.
	Engage the media as a platform for education and debate.
Community development	Work with community groups, local stakeholders,
Who can take action?	other partners and individuals to define local needs
- Governments	and priorities for better health.
- Organizations	Develop locally-based activities to contribute to
- Workplaces	healthy lifestyle to suit community needs, such as
<ul><li>Schools</li><li>Health professionals</li></ul>	walking groups; community gardens; farmers'
- Communities	markets.
- Health consumers and carers	
- Individuals	Investigate gaining after-hours access to school sporting and recreational facilities for community
	purposes.
Targeted interventions	Design and deliver programs to suit:
Who can take action?	(i) Specific population groups (such as children,
- Governments	parents or adults, lower SES, Culturally and
- Organizations	Linguistically Diverse groups, older people) taking into
- Workplaces	account health literacy skills
- Schools	(ii) Particular settings (such as communities, neighborhoods, workplaces, schools, childcare
- Health professionals	facilities, residential care settings).
<ul> <li>Communities</li> <li>Health consumers and carers</li> </ul>	,
ricaltii tolisullieis allu taleis	Adopt policies and practices which support activity in
	the workplace; such as lunch-time walking groups;
	showers; bicycle racks; negotiate reduced membership costs at local gym facilities.
Strategic coordination, building partnerships and capacity building  Who can take action?	Develop and strengthen partnerships across a range of sectors and disciplines.

- Governments

- Food and drink industry

- Organizations

Workplaces

- Community groups

- Health professionals

- Health consumers and carers

- Individuals

Conduct health impact assessments to measure the likely and real impacts of government and industry policies and activities likely to affect the health of communities.

Build workforce capacity to meet future needs, taking into account the full range of skills required.

Monitor new and emerging issues

Communicate and disseminate information

## (v) <u>Community-based non-communicable disease prevention - The North Karelia Project</u> in Finland

International research has clearly shown that non-communicable diseases have their roots in unhealthy lifestyles or adverse physical and social environments. Risk factors like unhealthy nutrition, tobacco use, physical inactivity, excessive use of alcohol, and psychosocial stress are among the major lifestyle issues. The entire population is at risk because of mass elevated risk factors in which individual susceptibility is enhanced by culture, economic factors, and the environment. Therefore, population risk should be amendable to change through community-wide strategies. The primary tool for implementing a population strategy of prevention is a community-based program. Community interventions use education and environmental change to promote and facilitate lifestyle and behavior changes needed to address a particular problem.

Integrated community-based intervention programs are comprehensive packages in which different kinds of feasible activities are combined to produce a synergistic effect. The community approach in chronic disease prevention has a high degree of generalizability, cost-effectiveness due to the use of mass communication methods, ability to diffuse information successfully through use of community networks, and potential for influencing environmental, regulatory and institutional policies that shape health.

In the early 1970's Finland had the highest CVD mortality rate in the world and mortality was particularly high among the middle-aged men in Eastern Finland. The North Karelia Project was started in 1972 as a national pilot and demonstration program for cardiovascular disease prevention. Reduction in the population levels of the well-established risk factors (smoking, elevated cholesterol and elevated blood pressure) was the main intermediate objective. A comprehensive community-based intervention involving health services, NGO's, industry, media and public policy was used. After the initial period (1972-1977), the project experiences have been actively used for comprehensive national heart health program. Due to the fact that non-communicable diseases share a few common risk factors, the project was later extended to cover also the other non-communicable diseases in addition to CVD (Puska et al).

At the same time with the North Karelia initiative, the new public health law, which was established in 1972, strengthened the legal basis of heart health and other health promotion in Finland. The new law changed the focus of health care system from curative services to prevention and created a new health service planning and financing system, which created more equal access to health services for all citizens, independent of their socio-economic situation or place of living. The new law formulated also the framework for the health care sectors' collaboration with other sectors in disease prevention.

Implementation of practical interventions was integrated into the existing health service structure and social organizations in the area in close collaboration with other governmental authorities and partners from private sector. Examples of different activities, both national and local level, related to the North Karelia Project and CVD prevention in Finland are shown in the box below.

#### The North Karelia Project: Health Promotion Interventions

#### Legislation

- The new Public Health (1972) law (more emphasis on prevention)
- Tobacco control legislation
- Legislative changes concerning some foods (e.g. mixing vegetable oil and butter)

#### Regulation

- Many public places were declared smoke-free areas. Later smoking was also prohibited in most public places through national legislation
- Regulation promoting healthier school lunches

#### Industry

- Heart healthy food products were developed and promoted in collaboration with local authorities, civic organizations, shops, supermarkets and the food industry
- Low-saturated fat products were developed and marketed in collaboration with local and national manufacturers
- Low-salt products were developed in collaboration with local bakeries and other parts of food industry
- A new type of rape plant was developed, which was effective in cholesterol lowering and grew well in the northern climate of Finland
- Broad collaboration for promoting berry farming and enterprizes to produce berry products

#### Information and mass media

- Public awareness on the health hazard of smoking was raised through mass media, health services and community organizations
- Several smoking cessation TV courses
- In order to reduce serum cholesterol levels, health education campaigns were conducted using a large variety of channels, including TV, newspapers, the health care system, schools and voluntary organizations
- "Keys to health" national TV programmes
- Cholesterol measurements were also widely used for education purposes and the aim was that everybody should know their cholesterol values. The primary aim of that, however, was not to screen high-risk subjects for individual intervention but to motivate people to

adopt the lifestyle changes promoted in the community.

 Intensive collaboration with local newspapers, radio, production of various materials, health fairs etc.

#### **Community involvement**

- Municipal politicians and authorities
- Lay opinion leaders
- Martta Organization (women organization)
- Heart Association and local Heart Association branches
- Sport clubs

#### **Education**

- Active collaboration with schools and educational institutions, nutrition education as part of home economics, etc.
- Special emphasis was placed on lowering salt and changing fat content in workplace menus
- Quitting smoking was supported by organizing smoking cessation courses in local health centres and workplaces
- Smoking prevention programmes were organized in schools as part of the North Karelia Youth Program, which aimed to teach school children the skills of resisting the social pressure to start smoking
- Wide education on non-pharmacological blood pressure reduction and blood cholesterol reduction through dietary changes and physical activity

#### **Health services**

- Systematic measurement, counceling and treatment of target risk factors
- Introduction of large hypertension control programme with detection, treatment and follow-up. A central hypertension registry was developed.
- Various information systems developed: patient cards, files, forms
- Strong collaboration between various professional groups, use of public health nurses
- Increased collaboration between health services and the community

Systematic monitoring of health behavior and risk factors was an integral part of the project. First population survey was done in 1972, and since then the survey has been conducted every five years. The survey area has been expanded from the original project area to other parts of the country and the data are used for national health and risk factor monitoring. Observed changes in risk factors are shown in the table below.

During the 35-year period of the Project, marked changes were observed in risk-related lifestyles and risk factors among the North Karelian people. Smoking prevalence among males has reduced markedly. Among females smoking was rare in the 1970s and an increase was seen in the 80s and 90s but the increase has levelled off during the last decade. Originally extremely high mean serum cholesterol and blood pressure levels reduced markedly. Similar risk factor reduction was seen later also in other parts of the country.

	Table 1: Main risk factors in North Karelia between 1972 and 2007 among men and women aged 30 to 59 years						
Year	Men			Women			
	Smoking (%)	Serum cholesterol (mmol/l)	Blood pressure (mmHg)	Smoking (%)	Serum cholesterol (mmol/l)	Blood pressure (mmHg)	
1972	52	6.9	149/92	10	6.8	153/92	
1977	44	6.5	143/89	10	6.4	141/86	
1982	36	6.3	145/87	15	6.1	141/85	
1987	36	6.3	144/88	16	6.0	139/83	
1992	32	5.9	142/85	1 <i>7</i>	5.6	135/80	
1997	31	5.7	140/84	16	5.6	133/80	
2002	33	5.7	137/83	22	5.5	132/78	
2007	31	5.4	138/83	18	5.2	134/78	

Reduction of risk factors was followed by a dramatic reduction in CVD and later on also in cancer mortality. In 2006 cardiovascular mortality among working-aged (35-64 years) men was 182 per 100.000, compared to 855 per 100.000 in the early 1970s. Further reduction has been observed also during the last five years.

Table 2: Mortality changes in North Karelia (per 100 000) among men aged 35 to 64 years					
	1969-1971	2006	Change		
All causes	1 509	572	-62%		
All cardiovascular	855	182	-79%		
Coronary heart disease	672	103	-85%		
All cancers	271	96	-65%		
Lung cancers	147	30	-80%		

Primary prevention and reduction of the three main risk factors — smoking, serum total cholesterol and blood pressure - explained about two thirds of the observed CVD mortality reduction (Vartiainen et al). The rest, about one third, may be explained by other factors, mainly changes in other risk factors (which were not included in the analysis), secondary prevention and improved treatment of acute cardiovascular events.

#### 6. Assessment of the health promotion program

The following section assesses the health promotion program with respect to (i) the health promotion policy organization, (ii) the planned health promotion activities (measures used and target groups), and (iii) the evaluation framework (indicators and proposed levels of analysis), highlighting potential areas for improvement. The analysis is done in relation to the

epidemiological situation and disease burden in Latvia, and the international guidelines and best practices.

The following key factors will be assessed:

Health promotion policy organization	Are the goals of the health promotion policy aligned with the disease burden, risk factors and appropriate target populations?  Is there a clearly organized institutional framework for health promotion?
Health promotion activities	Is there a comprehensive health promotion approach that is in line with international best practices?  Do the health promotion activities target appropriate risk factors and populations (including vulnerable groups)?
Evaluation Framework	Is there a clear evaluation framework and have appropriate indicators been chosen both at the municipality and national level?  Are different types of monitoring and evaluation approaches (including impact evaluation) being used?

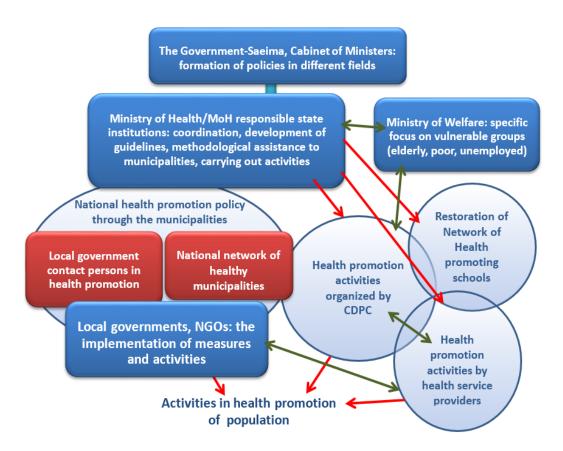
## (i) Health promotion policy organization

The new Public Health Strategy for the period 2014 to 2020 which was approved by the Cabinet of Ministers in September 2014 defined four priority areas for health promotion: perinatal and neonatal health, oncology, cardiovascular health, and mental health. More specifically the strategy lists the following topics for action: healthy diet, physical activity, mental health, sexual and reproductive health, breastfeeding promotion, injury prevention, prevention of infectious diseases and reduction of addictive substance use.

The selected four main areas for health promotion are well grounded. CVDs are main cause of disease burden and mortality in Latvia. Cancer mortality is relatively high and there are also problems in early detection and treatment of cancer patients. In the prevention of cardiovascular diseases, cancers and other non-communicable diseases, main emphasis needs to be put to reduce the levels of four leading risk factors: tobacco smoking, unhealthy diet, sedentary lifestyle and harmful consumption of alcohol. Mental health is also one of the leading contributors for disease burden in Latvia even though the data on the mental health problems and their background factors are not sufficient to exactly define the needed preventive measures. Use of alcohol, an important contributor of mental health problems, is relatively high. Use of illegal drugs is relatively high, particularly among young men in Riga. Also suicide

mortality is higher than in the Nordic countries. Development in prenatal, maternal and child mortality has been positive in the last two decades but mortality is still above the European average.

Institutional framework for health promotion in Latvia has been characterized by a regular redistribution of functions between the authorities and frequent change of the authorities responsible for the public health issues. Organizational framework of health promotion in Latvia is shown in the figure below.



Since January 2013 methodological management and co-ordination of health promotion activities at national and municipal level is carried out by the Centre for Disease Prevention and Control (CDPC), while the Ministry of Health (MoH) is responsible for normative base of health promotion, ie. legislation and policy planning documents at national level and supervision of the implementation of the policy. Social security and welfare is the responsibility of another ministry, Ministry of Welfare. Local government (municipalities) role in health promotion policy in Latvia is determined by law "On Local Governments", i.e. promoting healthy lifestyle and sports.

To provide methodological support to the local authorities for health promotion policy at the municipal level (emphasizing the statutory role) as well as organization of the work and activities, MoH issued in 2012 "Health Promotion Guidelines for Local Governments". The

guidelines summarize both Latvian and foreign examples of good practice for various health promotion activities and initiatives for four target groups - pre-school and school-age children, adults (workers), new mothers and young families and the elderly (over 65 years). Key areas of the guidelines are physical activity, healthy eating, addiction prevention and family health (injury prevention, infectious disease prevention, oral health, reproductive health).

Since 2012, the municipalities were invited to nominate a contact person for health promotion to communicate and collaborate with CDPC. Currently, 86 of the 119 municipalities have nominated the contact person, either part or full-time. Municipalities, which have nominated a health promotion contact person receive information and methodological support for health promotion regularly, as well as information on publicly funded health promotion activities in the municipality, training opportunities, and issued materials etc. In 2012, with the support of the European Social Fund, 30 hours training program was organized for the local health promotion contact persons. The training program was implemented in Riga Stradins University and the Society of Latvian Doctors. Total of 204 people participated in the courses.

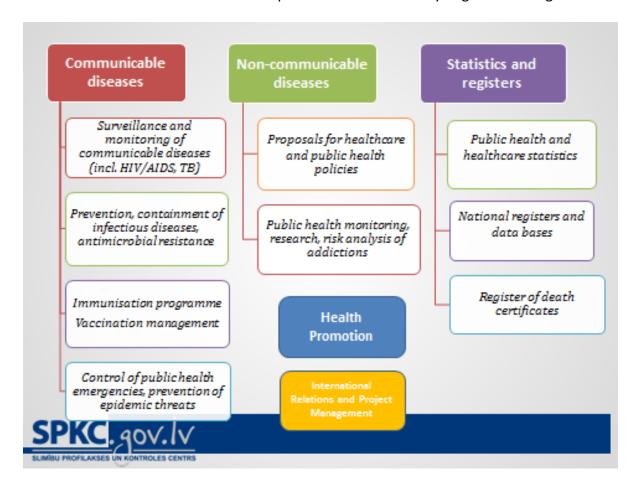
In order to promote the implementation of Public Health Strategy for 2014 to 2020, MoH has initiated, in collaboration with WHO, the Latvian Association of Local and Regional Governments and Riga Stradins University, the national network of healthy municipalities (NVPT) as part of the WHO Healthy Cities program. NVPT aims to promote good practices and exchange of ideas, to support local governments and to provide methodological support for various public health and health promotion issues. Participation in NVPT is voluntary and free. Already 35 municipalities have joined to NVPT. The network organizes for its members workshops and exchange visits. Every year a specific health promotion topic is determined by the network, which the local governments will implement. In 2014 the selected topic was promotion of physical activity.

Furthermore, CDPC together with the MoH and the Ministry of Education and Science, the State Service of Education Quality, the National Centre for Education, the Latvian Association of Local and Regional Governments, the Latvian Parents Forum (NGO) and the WHO has started the restoration of the National Network of Health Promoting Schools. An advisory body - the Council of Network of health promoting schools (NHPS) has been created aiming to promote the creation, development, coordination, cooperation and monitoring of NHPS in Latvia. Any educational institution that wishes to implement health promotion activities can be involved. Active recruitment of member institutions is planned to be done in 2015.

Organizational framework for health promotion is basically sound. Because health and social welfare are in different ministries, close collaboration between these two ministries is critical. There are two traditions in Europe in organizing health and social welfare at government level: in some countries health and welfare are under the same ministry and in some others separately, or have social welfare and labor combined. Both models have their theoretical and practical justifications.

Furthermore, health and wellbeing is not only the issue of the MoH and Ministry of Welfare, but inter-sectoral collaboration and involvement of other ministries is also necessary. In the previous policy documents and in the new Public Health Strategy for 2014-2020 health promotion methods are mainly related to educational and social communication activities aimed at promoting healthy conditions, lifestyles, behavior, and to some extent to reorientation of health services, but the implementation of other key components of health promotion, namely change of environmental and societal conditions, and inter-sectoral collaboration is weak and needs to be further developed. A comprehensive plan and permanent structure, both at national and local level, is needed for inter-sectoral collaboration and action for health. To change behavior, reduce the levels of risk factors, and disease burden, healthy choices need to be the preferable and easy ones.

Organizational structure of CDPC is described below. The main functions of the organization are prevention and control of communicable and non-communicable diseases, data collection and maintenance of statistics and registers, health promotion and international relations and project management. CDPC is responsible for planning and organizing health behavior surveys Practical data collection is outsourced but supervised by the organization. At the moment CDPC has 150 staff members of which three quarters have a university degree including ten PhDs.



In the implementation of health promotion program, the role of CDPC is critical. It needs to have a clear mandate within the government system, and sufficient human and material resources, as well as organizational and financial continuity. Creation of the health promotion contact person network at municipal level is very useful, even though the network is not covering all municipalities yet. Continuous communication and collaboration is needed between CDPC and the contact persons (through personal communication, common website, newsletter, meetings, training seminars and conferences, etc.). Contact persons needs to have clear mandate at the municipality level, and they should be the promotors and coordinators of health promotion of inter-sectoral collaboration at municipality level. Health promoting municipalities (cities) and health promoting schools are well established setting-based health promotion strategies. Health promoting workplaces could be considered as the third setting-based strategy. Planning and implementations of these strategies and activities should be coordinated and closely linked with the other health promotion activities of CDPC and the local health promotion contacts.

## (ii) Health promotion activities

The health promotion plan for the whole period 2014-2020 includes 36 different programs having a total budged over 50 million Euros funded by the European Union (annex 1). The topics of the program are divided into the following broad areas:

- Reducing spread of addictive substances (alcohol, drugs and tobacco) and processes (games of chance, computer addiction etc.);
- Healthy food promotion;
- Promotion of physical activities in society
- Sexual and reproductive health
- External mortality causes, traumatism prevention
- Oral health
- Infection disease prevalence reduction
- Mental health (stress management, mental overload, workaholics etc.)

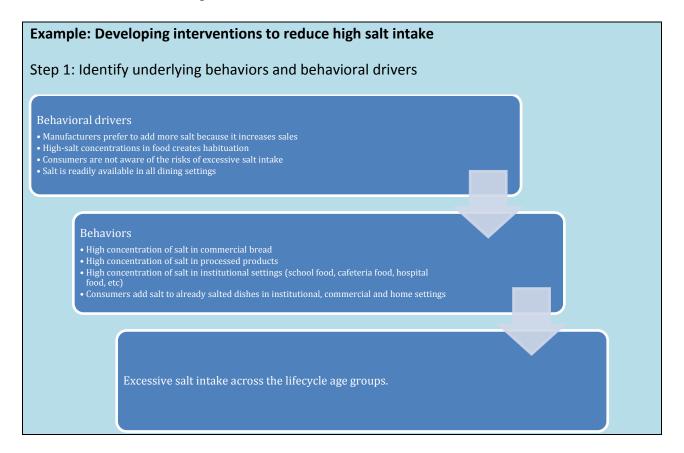
Topics of the programs are relevant, but the implementations plan is not clear and needs to be revised. Based on the epidemiological data on health behavior, risk factors and morbidity and mortality, two areas need particular emphasis: reduction of tobacco smoking and reduction of alcohol consumption. Promotion of healthy eating and physical activity are also important, but more complex issues, and additional information may be needed to effectively emphasis them.

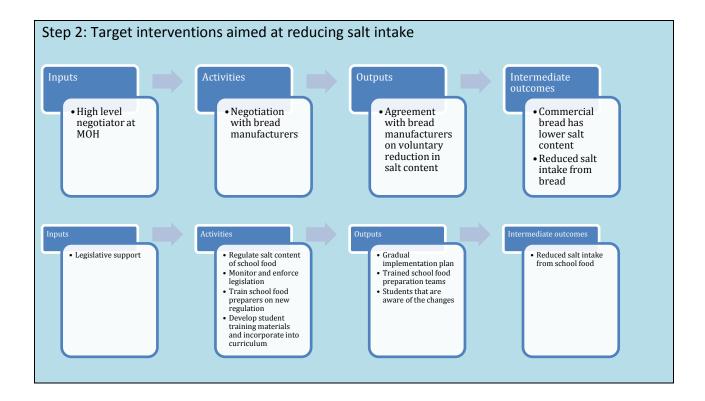
In the programs, the main planned activities are: (1) thematic lectures and seminars, (2) organizing interest groups, (3) development of peers education programs, (4) production of educational short movies, (5) interactive educational classes, (6) activities in municipalities aimed at popularization of particular behavior or opportunities, (7) elaboration of addiction prophylaxis programs and implementation in educational establishments, (8) organizing summer camps, (9) production of informative materials (posters, books, brochures, Avmaterials) and (10) complex public information materials. All of the mentioned activities are

related to information dissemination as the main methodology for behavioral change. In addition to these individual level activities, more broad social, economic and environmental approach is needed.

For effective reduction of main non-communicable disease risk factors and disease burden, in addition to information and communication, creation of health promoting environment is necessary. For example, an intervention that aims to educate children about the dangers of eating too much salt is unlikely to be helpful if not packaged with an effort to reduce salt in the food that children and teens normally consume: this might be done through regulation and monitoring of salt contents in school food and negotiations with manufacturers. Tools for environmental change include tax and price policy, legislation and regulation, environmental planning, collaboration between different government sectors and public-private partnership.

Implementing environmental change interventions first requires an identification of risk factors for specific diseases and an analysis of underlying behaviors and behavioral drivers producing these risk factors. Once these underlying behaviors and behavioral drivers have been identified, interventions can be better targeted. The example below shows the process for targeting interventions to reduce high salt intake, a risk factor for cardiovascular disease.





Even though most of the non-communicable disease prevention is done outside of the health sector, participation and support of doctors and other health professionals is critical for success. Health professionals are usually trusted experts and opinion leaders in the community they are working. Two of the nine targets in WHO Action Plan are directly related to health services. Health services do risk factors screening and counselling of healthy lifestyles is part of the treatment of every patient. Particular emphasis should be put on smoking cessation support among smokers.

#### Reaching Vulnerable Groups

The health promotion plan recognizes five social exclusion groups: children, elderly, poor people, the unemployed, and people living in rural and remote areas. These audiences can be characterized as "hard to reach" because they are less integrated into daily life, service delivery systems and communication networks.

In Latvia, as in many other countries, people with low income and low education have poorer health, poorer access to health services and shorter life expectancy compared with people with higher income and education (Public Health Strategy for 2011-2017). Detailed data on socio economic differences in health in Latvia are not available but a recent report on 13 European countries shows that socioeconomic differences in health in the neighboring Baltic countries, Estonia and Lithuania, are larger compared to other European countries and health inequity in those two countries has markedly increased in the last two decades (Mackenbach et al). The situation in Latvia may be similar and therefore needs particular emphasis, beginning with data

collection and analysis to examine socioeconomic differences in risk factors and related health outcomes.

A recent study from Germany stresses the need for involvement of the social security system in interventions to target the unemployed<sup>1</sup>. In the case of Latvia, this would be the Ministry of Welfare. Similar involvement from this system may also be needed to reach the poor and the elderly, since these are some of the target groups served by the Ministry. There are also a number of evidence-based guidelines on approaches for reaching the elderly which might be consulted<sup>2, 3</sup>. Some countries, such as Australia, have paid specific attention to developing health promotion services in rural and remote areas, and some of their approaches could be reviewed to see if they are applicable in Latvia<sup>4</sup>.

Each of the six social exclusion subgroups requires health communication tailored to their needs in order to ensure that they receive the information and social support that resonate with their lifestyle at the right time, resulting in healthier choices.

Recognizing that behavior always occurs within a particular social context, the socioecological framework in Figure 1, below, is a useful model to conceptualize relationships between individual behavior and societal context.

Barriers to individual behavior can arise at any level and communication helps to overcome those constraints at the relevant levels. Individuals, households and communities need strategically designed SBCC initiatives to trigger dialogue around and adoption of new social norms and behaviors. Health professionals, educators and others who provide social services need enhanced communication skills, a conducive organizational environment and a supportive policies and leadership to create and effectively deliver these SBCC programs.

The Social Ecological Model also underscores how important it is to integrate SBCC efforts with efforts to expand services, increase access to commodities, and train and equip providers. Without this linkage, increased demand for products and/or services that cannot be provided

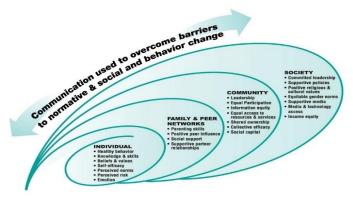


Figure 1: Social Ecological Model of Communication

<sup>&</sup>lt;sup>1</sup> Brussig, M. et al, "Health promotion for unemployed jobseekers: New developments in Germany", Health Policy, 114 (2014), 192-199.

<sup>&</sup>lt;sup>2</sup> Lis, K., Reichert, M., Cosack, A., Billings, J. & Brown, P. (Ed.) (2008). *Evidence-Based Guidelines on Health Promotion for Older People*. Austrian Red Cross, Vienna.

<sup>&</sup>lt;sup>3</sup> National Council on Aging, Evidence-based Health Promotion Programs for Older Adults, Washington, DC, 2012

<sup>&</sup>lt;sup>4</sup> See for example: <a href="http://ruralhealth.org.au/news/shining-light-rural-and-remote-health-0">http://ruralhealth.org.au/news/shining-light-rural-and-remote-health-0</a>, or Commonwealth of Australia, *National Strategic Framework for Rural and Remote Health*, Canberra, 2012

effectively will frustrate audiences and may produce a backlash against the messages.

Given the diversity of audiences and health needs prioritized in Latvia, a primary challenge will be to develop an overarching theme or strategic focus that will link everything into a coherent whole. One such approach focuses on Life Stages or the Life Cycle of families. In Egypt from 2004-2011, an integrated national health program, *Communication for Healthy Living* (CHL), focused on "families as producers of health" and strategically segmented the needs of different audience subgroups depending on their life stage (Hess et al., 2012). At the same time the CHL slogan, "Your Health is Your Wealth," served to unify the overall campaign (see Figure 2).

Specific behavior change communication activities were designed for each audience segment and each desired behavior, taking into account the unique set of factors that influence that audience segment. At the same time, the "health is wealth" theme addressed a widely held value—identified during formative research—that resonated with all age cohorts in society. In addition, while each life stage had specific behavioral objectives, the overall framework acknowledged how the stages were transitional and operated within the context of the family and community as a whole. Good health behavior adopted at an early stage, or collectively, represents a positive health investment and will have a cumulative, sustainable impact on future health behavior.

Some behaviors, such as hand-washing, basic hygiene practices and nutrition are relevant at all stages, as are some attitudes, skills and resources (e.g., self-efficacy or confidence to manage one's health; ability to seek and understand health information; ability to access services, health commodities and social support). Another integrated approach, health competence (Storey et al. 2008, Pollock & Storey 2012), attempts to strengthen those crosscutting behaviors, attitudes, skills and resources in order facilitate healthy decisions across a wide range of outcomes. Studies have

Figure 2: The Life-Stage Approach



shown that health competent individuals practice more healthy behaviors over time and that early development of health competence has a catalytic effect on subsequent behaviors.

## The Communication Planning Process (P-Process<sup>TM</sup>)

Latvia proposes to involve a multi-sectoral set of government partners from the health, education, agriculture and other sectors, as well as partners in the media and at the community level. Strategy development should be a collaborative effort that engages all stakeholders in

order to optimize consensus and commitment and to synchronize efforts across sectors, health areas and levels of society. Beyond the planning stage, stakeholders should also be involved in the creative stage when messages and materials are developed and tailored to local needs, while at the same time ensuring that messaging is consistent with the overarching theme and "branding" of the campaign. Wide stakeholder involvement also strengthens the overall research, monitoring and evaluation process that produces evidence for decision-making and impact assessment. Finally, engagement and participation by stakeholders at all levels contributes to a "learning in action" process that builds capacity for future communication campaigns.

The P-Process (Figure 3) (HCCC, 2013) provides a roadmap for strategic communication planning. This road map ensures that communication activities and outputs are coordinated and harmonized in order to achieve agreed-upon goals and objectives. It is based upon evidence and typically outlines priority audiences, communication objectives, strategic approaches, positioning and messages, along with plans for implementation and monitoring and evaluation. It consists of five steps.

 Inquire aims to gain a deeper understanding of the SBCC challenge within a specific context and of the social and behavioral drivers that facilitate or act as barriers to uptake of desired behavior(s). Latvia has already done a great deal of work on this stage and is well-positioned to translate their situation analysis into a strategic communication plan.

Figure 3: The P-Process



- Design Strategy involves creating the plan that everyone will support. This includes developing the conceptual framework (theory of change) and theme or brand that will guide and unify all activities and messaging. Specific audience segments are defined and profiled, channels of communication are identified that reach the desired audiences and can convey the specific kinds of messaging required. Workplans and a monitoring and evaluation plan are developed. Again, Latvia has done a great deal of work on this stage, but may need additional analysis of the vulnerable population groups from a communication perspective and identify a unifying theory of change and program brand that will integrate all activities and messaging.
- Create & Test involves developing the program's communication products, including mass
  media and print materials, participatory processes, trainings, community events and more
  that are consistent with the strategy, theme and brand of the program and have the
  greatest likelihood of affecting the specific behavioral determinants identified in the Inquire
  stage. Pretesting is essential to confirm that messages are clear and actionable.
- Mobilize & Monitor involves implementation and careful process monitoring to ensure that
  the strategic plan is progressing as planned. Local stakeholders should play a central role in

- monitoring so that challenges or shortcomings can be identified and corrected mid-course, if necessary.
- Evaluate and Evolve requires measurement of change in intermediate behavioral determinants targeted by the program strategy as well as behavioral and health outcomes that result from those intermediate changes. Rigorous impact evaluation designs link program exposure to those outputs and outcomes in order to establish causal inference and to verify that the specific strategy developed for the program is, in fact, the mechanism by which change occurs. This is a key aspect of learning that helps public health programs evolve and improve year after year.

To reduce health inequalities, however, including environmental change in a comprehensive health promotion strategy is usually more effective than health education and communication alone. Educated people have better health literacy, more resources and they are more interested on their own health, and therefore they usually gain more on health education campaigns than the lower educated ones. In contrast, increase of tobacco price and reduction of the price of healthy food items affect more the behavior of poor people compared to the rich ones, and a free healthy school meal improves the nutrition of children of poor families.

### (iii) Evaluation framework

The planned evaluation framework includes 22 indicators and a separate plan for assessment of health at local level (annex 2). The suggested indicators are classified in six groups: general (one indicator), CVD (4 indicators), oncology (3 indicators), mental health (6 indicators), perinatal health (3 indicators) and socioeconomic situation (3 indicators). Most of the indicators are related to mortality, morbidity and use of health services. The level of data collection ("availability" and "usability") is also defined for each indicator. Detailed comments on the indicators are given in the annex.

Even though these indicators are important for assessment of the health situation in Latvia, they cannot be used for evaluation of the planned health promotion program at this stage. Instead of morbidity and mortality, main emphasis needs to be put for monitoring of health behavior and levels of risk factors, and related knowledge and attitudes. In these mediating factors change can be seen in a few years but at least 5-10 years is needed to see the effect of the program in mortality. In addition, there could be a number of confounding factors contributing to morbidity and mortality, which would make it difficult to isolate the effect of health promotion interventions.

#### For example:

 In a road safety campaign, the impact on the number of road accident fatalities might be blurred by factors such as availability of emergency medical care, road conditions or weather conditions. However, factors like seat belt usage, helmet usage, incidence of drunk driving are intermediate outcomes that can give a good indication of whether specific interventions are working.

 In a school health campaign, establishing the link with incidence of cancer, cardiovascular conditions will be near-impossible since there would be a significant time delay until enough cases emerge. However, one could measure reductions in risk factors such as child obesity/BMI, physical activity, use of tobacco, as well as specific outcomes like teen pregnancies.

The program will need to map the specific risks that it wants to tackle. These should be defined along each of the priority areas. In addition, since there seems to be a different focus on different age groups, identifying the risk factors by lifecycle stage will help structure the program. A map of priority risks may look as follows:

	Infants and preschool age	School-age children	Pre-teens, Teenagers,	Young adults	Mid-age adults	Elderly
MCH, sexual and reproductive health	No or little breastfeeding		STIs, teenage pregnancy	STIs, unplanned pregnancy	STIs	
Mental health and addictions		bullying	Tobacco initiation, drug initiation, alcohol use, bulling	Tobacco use, drug use, alcohol abuse, stress	Tobacco use, drug use, alcohol abuse	Tobacco use, drug use, alcohol abuse
Cardiovascular and cancer		Obesity, low intake of fruits and vegetables, high intake of salt, low physical activity	Obesity, low intake of fruits and vegetables, high intake of salt, low physical activity	Obesity, low intake of fruits and vegetables, high intake of salt, low physical activity  Smoking, alcohol abuse	Obesity, low intake of fruits and vegetables, high intake of salt, low physical activity  Smoking, alcohol abuse	Obesity, low intake of fruits and vegetables, high intake of salt, low physical activity  Smoking, alcohol abuse
Accidents and external causes	SIDS, falls, drowning, traffic accidents			Drunk driving, inexperienced driving	Safe driving	

Monitoring of health behavior – particularly smoking habit – is recommended to be done annually or at least biennially by using health interview or questionnaire survey. Data on physical and biological risk factors should be collected in every 4 to 5 years.

In addition to monitoring of indicators, other evaluation approaches should be considered. These include evaluation and impact evaluation.

# Types of monitoring and evaluation approaches

There are three broad types of monitoring and evaluation activities: monitoring, evaluation, and impact evaluation.

Monitoring is a continuous process that tracks what is happening within a program and uses the data collected to inform program implementation and day-to-day management and decisions. Usually, monitoring tracks inputs, activities, and outputs. Monitoring should be done for all programs, even those that have a track record of successful implementation

Evaluations are periodic, objective assessments of a planned, ongoing, or completed project, program, or policy. They are used to answer specific questions related to design, implementation, and results. Broadly speaking, evaluations can address three types of questions: (i) Descriptive questions: the evaluation seeks to determine what is taking place and describes processes, conditions, organizational relationships and stakeholder views; (ii) Normative questions: the evaluation compares what is taking place to what should be taking place and (iii) Cause-and-effect questions: The evaluation examines outcomes and tries to assess what difference the intervention makes in outcomes.

Impact evaluations are a particular type of evaluation that seeks to answer cause-and-effect questions, i.e. what is the impact (or causal effect) of a program on an outcome of interest? An impact evaluation looks for the changes in outcomes that are directly attributable to the program. Impact evaluations can be costly, lengthy and impose constraints on programs. To justify mobilizing the technical and financial resources needed to carry out a high-quality impact evaluation, the intervention to be evaluated should be: (i) Innovative — it is testing a new, promising approach; (ii) Replicable — the program can be scaled up or can be applied in a different setting; (iii) Strategically relevant — the program is a flagship initiative, requires substantial resources, plans to cover a large number of people, or could generate substantial savings; (iv) Untested — little is known about the effectiveness of the program (v) Influential — the results will be used to inform key policy decisions.

Impact evaluations estimate the impact of the program by comparing a set of intervention beneficiaries to another set of beneficiaries that is similar but does not benefit from the intervention. The gold standard method, just like in medical experiments, is to divide a group of potential beneficiaries into two sub-groups, a treatment group and a comparison group, using randomized assignment.

There are certainly opportunities to come up with impact evaluation strategies in Latvia. For example:

- 1. The existence of over rural 100 municipalities could offer opportunities for evaluating programs that are implemented at the municipality level. For example, if municipalities are asked to come up with municipal action plans, one could think of a roll-out plan where 50 randomly chosen rural municipalities are asked to come up with a plan and implement it. They would be the "treatment" group of municipalities, while the other municipalities are the "comparison" group. Once the evaluation shows that the program is effective, it could be rolled out to the other municipalities. If the evaluation shows that the program is not effective, then it would be better not to implement the program in the remaining municipalities, and come up with a better approach.
- 2. For interventions that target children and are carried out in schools, one can think of a roll-out plan where schools are selected to take part in an evaluation study, and half of the schools are assigned to treatment group while the other half are assigned to the comparison group. This methodology might be useful for piloting a school-based program that attempts to increase physical activity and improve eating habits among school children.

Other programs, such as efforts to reduce salt in processed products, are not amenable to impact evaluation because it is not possible to identify treatment and comparison groups. However, this type of program can be monitored and evaluated: for example, it might be useful to periodically collect a representative sample of the bread that is sold in Latvia, and ensure that the salt content is gradually reducing.

Use of health service data is usually demanding and needs very careful interpretation to avoid biased conclusions. Particularly in out-patient services diagnostic procedures are often poorly defined and data structure not systematic. Furthermore, increase of health service use – for example for mental health problems - may indicate increased morbidity and real demand, but also better availability. Suggested oncology indicators are demanding but may be available in the national population-based cancer register in CDPC. Death registration is usually quite reliable in European countries and is usually the most reliable register-based outcome indicator. However, as mentioned earlier, mortality from chronic non-communicable diseases change relatively slowly – usually at least 5-10 years is needed to see the effects health promotion activities on mortality. Furthermore, due to small population in Latvian municipalities, mortality and other outcome indicators can be used only at national, or when relevant at regional level.

#### Criteria for assessment of health at local level

The proposed "Criteria for assessment of health at local level" is technically demanding, and most probably not feasible, and some of the indicators are not relevant in Latvian context. For calculation of the suggested morbidity and mortality indicators, Latvian municipalities have too

small population. Even though the needed data would be available —which may not be the case — the number of event in each municipality (unit of analysis) will be too small (and prone for random variation) for any meaningful statistical comparison. Therefore, morbidity and mortality indicators can be used only regional and national level and the suggested UK evaluation model is not feasible in the Latvian context.

In analyzing population-based risk factor data, the unit of analysis is related to the sample size of the survey. The needed sample size (power) varies depending on the variable in interest but is usually at least 500 for each cell (area, sex, age-group, etc.). In the EHES protocol the recommended minimum sample size is 4000 for one country. By using this sample size in Latvia, meaningful comparisons could be done in total of 10 cells, ie. the data could be analyzed stratified by sex and six study areas (Riga and five regions). Larger sample size is possible if needed resources are available. Other important factor, in addition to the sample size, affecting both the statistical power but also the reliability of the collected data, is the participation rate. To get a reliable population estimate, participation rate should be as high as possible, at least 70%. Unfortunately quite few European countries are able to reach this level participation activity in their health surveys.

On the other hand, the proposed process indicators are useful and also feasible for the monitoring of health promotion activities at municipality level and they provide data also for national assessment. Process monitoring could be done annually by collecting data from the municipalities including the following indicators, for example:

- the municipality has full/part time health promotion staff
- the municipality has a delegated health promotion contact person
- the municipality has health promotion policy planning document
- health promotion is included in the local (multi-sectoral) planning document in the municipality (and the municipality has a multi-sectoral health promotion coordination mechanism)
- the municipality is participating in Healthy Municipalities/Cities program
- the municipality is participating in Healthy Schools program (and number of participating schools)
- summary data on health promotion activities in the municipality
- budged for health promotion in the municipality

It should be noticed, that the Latvian municipalities and cities vary very much in size. Riga is a metropolitan city whereas other cities and municipalities are small. Therefore, to assess health promotion activities and resources in Riga, a specifically designed evaluation tool may be needed.

#### 7. Summary of findings

Health of the Latvian population has markedly improved in the last decades. However, despite the positive development, life expectancy is still lower and mortality – from cardiovascular diseases in particular – higher than in the neighboring Nordic countries. Also in comparison

with the two other Baltic countries, health situation in Latvia is slightly worse than in Estonia and Lithuania. Notable is also that gender difference in life expectancy and mortality in Latvia, as in the other Baltic countries, is much larger than in the Nordic countries.

The selected areas of intervention, cardiovascular diseases, cancer, maternal and perinatal mortality, and mental health are well founded and based on sound interpretation of epidemiological data. Topics of the planned health promotion activities - healthy diet, physical activity, mental health, sexual and reproductive health, breastfeeding promotion, injury prevention, prevention of infectious diseases and reduction in the use of addictive substances – are also appropriate measures to help to tackle the disease burden from the selected priority diseases, and are in accordance with the evidence on international best practices. However, in the context of cardiovascular disease and cancer prevention, different types of addictive substances, tobacco, alcohol, and illegal drugs, needs to be separated. Strategies to reduce the levels of these three addictive substances are different. Based on the risk factor data available, reduction of smoking prevalence is the priority area of action. Alcohol consumption is also high. Data on diet and physical activity is less comprehensive and additional information may be needed to develop sound strategies and activities for improvement. In healthy nutrition, the critical components are fruit and vegetable intake, salt consumption and amount and type of fat.

The health promotion policy organization in Latvia is basically sound. MoH has the political, normative and regulatory leadership. The Latvia Center of Disease Prevention and Control (CDPC) co-ordinates activities and provide technical support for the municipalities, which (most of them) have nominated their own health promotion contact persons. Critical is, that both CDPC and the municipalities will have the needed resources and organizational stability. Intersectoral collaboration needs to be strengthened both at national and local level, and the role of non-governmental actors, community organizations and private sector need to be better recognized.

The approach of the planned health promotion activities and strategies is quite narrow and utilizes mainly education and information dissemination and individual level interventions as the method for behavioral change. More emphasis needs to be put on (social, cultural, economic and physical) environmental change. Furthermore, determinants of health behavior are largely outside of the mandate of the health sector and therefore, the involvement of other sectors and multi-sectoral action is necessary.

The planned evaluation framework relays mainly on collection of morbidity and mortality data which is important information for assessment of general health status of the population but not sensitive and timely enough for monitoring and evaluation of health promotion program. Therefore, main emphasis should be put regular and systematic collection of data on behavioral, physiological and biological risk factors and their determinants. Responsible organizations for data collection and their epidemiological analysis need to be defined (or established) and needed resources allocated.

#### 8. Recommendations

In light of the findings of this assessment, the following section summarizes recommendations for improvement of Latvia's health promotion program and provides suggestions for potential next steps.

# (i) Health promotion policy organization

Health promotion policy organization in Latvia with its three levels – political (MoH), national technical (CDPC) and local (local governments and the network of contact persons in municipalities) – is basically sound. However, organizational stability and sufficient resources needs to be guaranteed. Permanent structures for inter-sectoral collaboration need to be created for both national and local level. Collaboration and mutual understanding between MoH and Ministry of Welfare is necessary.

The mandate of CDPC is critical for coordination and technical support for health promotion and diseases prevention. It should be discussed whether the mandated could cover also data collection and monitoring of health behavior and risk factors.

The infrastructure of health promotion in general – including organization, staff and financing – needs to be critically assessed. Roles and responsibilities of different organizations in planning and implementation of health promotion activities, collection and analyzing epidemiological data, and evaluation of activities need to be clarified. An establishment of a national public health institute (NPHI/CDC) – having a broad mandate covering health promotion and protection, diseases prevention, and monitoring of risk factors and health situation in the population, and including both infectious and non-communicable diseases – should be considered as an option.

Main emphasis in health promotion strategy should be put on reduction of main non-communicable disease risk factors, tobacco smoking and alcohol consumption in particular. More data is needed on the levels of other behavioral risk factors — such as diet and physical activity — biological risk factors (blood glucose and cholesterol levels) and mental health, in the population.

In health promotion, environmental change needs particular attention. Even though health behavior, such as smoking, alcohol consumption and physical activity is an individual decision, it is largely affected by social, cultural, economic and physical environment. Environmental change is also a tool to improve health equity. Healthy choices should the easy and affordable ones.

Even though the determinants of health are largely outside of the health sector involvement of the health service providers in health promotion and disease prevention is important. First, risk assessment and, if needed, support for behavioral change should be part of every patient contact. In addition to behavioral change, doctors and other health professionals are responsible for pharmaceutical treatment of biological risk factors, such as high blood pressure, high cholesterol and high blood sugar. Second, health professional are recognized experts and community members in their communities, and their capacity is needed for promoting environmental change and crating healthy environments.

The strategy needs to have clearly defined targets and indicators for monitoring. WHO Non-communicable Disease Action Plan and its nine voluntary targets, and related 25 indicators, adjusted for the Latvian context, could be used as the foundation for the strategic planning. Neighboring Baltic and Nordic countries could be used for benchmarking.

Inter-sectoral collaboration and multi-sectoral action for health need to be strengthened both national (government) and local (municipality) level. Collaboration between MoH and Ministry of Welfare is particularly important but involvement of the other sectors is also necessary. Furthermore, involvement of non-governmental actors, such as community organizations, professional societies and private business sector is needed.

Finally, sustainable funding system for health promotion needs to be established. Health promotion and appropriate funding are included in the Public Health Strategy 2014-2020. In the coming few years, a large proportion of financing is coming from the EU. However, it is crucial to plan sufficient funding in the general budget of Latvia for health promotion, so it does not depend solely on the EU and other outside funding sources. The possible sources for health promotion funding might be for example an earmarked share from excise tax from alcoholic beverages and tobacco products.

### (ii) <u>Health promotion activities</u>

In health promotion, a comprehensive approach is needed including:

- health education and communication (including programs targeted to specific vulnerable population groups)
- environmental change
  - price and tax policy
  - legislation and regulation
  - environmental planning
- community participation
- multi-sectoral action
- involvement of private sector
- reorientation of health services
  - screening of risk factors (and cancer)
  - special services for vulnerable groups

Topics of the planned health promotion activities are adequate and based on the available epidemiological data. However, a more comprehensive approach is needed for implementation. In particular, this approach should include some elements of environmental change.

For example, for a reduction of tobacco smoking, the following interventions should be targeted:

- price and tax increase
- smoke-free environment
- ban of advertising and sales promotion
- pictorial warnings and plain packaging
- prevention of smoking initiation among young people
- help smokers to stop smoking
- control of illegal import

Similarly, for a reduction of harmful alcohol consumption, the following interventions should be considered:

- price and tax increase
- restrictions on advertising and sales promotion
- reduction of total alcohol consumption
- control of illegal import

Physical activity and healthy diet can be promoted by:

- general health education and information
- health promoting price and tax policy
- legislation and regulation (including labeling of food products)
- product development and collaboration with private sector
- environmental change and health promoting city planning
- providing physical activity and healthy meals at schools

Data on risk factors and related health outcomes need to be collected and analyzed in relation to the socioeconomic background factors. Changing environment and affecting the socioeconomic determinants of health is an effective tool to reduce inequity in health. In addition, targeted individual interventions are also needed to improve the health of the most vulnerable groups.

For the promotion of healthy diet and physical activity more data is needed on dietary habits among the whole population and sub-groups. However, salt intake, consumption of fruits and vegetables, and the type and amount of fat are the key nutritional issues in NCD prevention, and should therefore be the focus of health promotion interventions. For the promotion of physical activity, specific types of physical activity should be targeted (i.e., at work, commuting and leisure time).

Setting-based health promotion could also be pursued by (i) activating and extending the existing healthy cities and municipalities and healthy schools networks and (ii) considering initiation healthy work places network and activities

Finally, collaboration and communication within the health promotion network also needs to be strengthened. This can be done with the following tools, activities and inputs:

- web-based tool
- newsletter
- regular meetings and training events
- annual health promotion conference
- needed budged allocation

#### (iii) Evaluation framework:

A comprehensive health promotion evaluation framework needs to be established, and the roles and responsibilities of different organizations (MoH, Statistical Office, CDPC, Cancer Registry, academia, municipal authorities, etc.) clarified. Available data (on health behavior, risk factors, knowledge and attitudes, morbidity and mortality, use of health services, etc.) need to be analyzed and a plan for future data collection and monitoring done.

The reviewed documents only include indicators at the level of final outcomes. For a monitoring and evaluation strategy, it's helpful to have indicators of final outcomes to understand the background of the program, identify major issues, and check whether indicators are moving in the right direction. However, this type of high-level indicators does not allow to monitor or evaluate the effectiveness of the program, since there are too many confounding factors that also affect those indicators. In addition, a much longer time period will be needed to observe the potential effects of health promotion interventions on morbidity and mortality indicators. Thus, the main emphasis of outcome evaluation should be put on continuous monitoring on health behavior and physical and biological risk factors.

Health behavior monitoring should be done every year or biennially through the already established health interview surveys, such as GYTS, GATS and Adult Health Behavior survey. For the assessment of the levels of physical and biological risk factors in the population, a new health examination survey system needs to be created using EHES or STEPS protocol as the model. Additional components relevant for the Latvian context can be included in the surveys.

In addition to monitoring of indicators, other evaluation approaches should be considered, including evaluation and impact evaluation.

Due to small population in most Latvian municipalities, outcome evaluation needs to be done based on larger units, nationally or if relevant regionally. In addition to geographic location, data need to be analyzed by gender, age-group and socioeconomic position. Due to needed sample size, sub-group analyses may be done at national level only. Assessment of health indicators (risk factors, morbidity, mortality) is not feasible and local level but local level process evaluation may be meaningful.

# (iv) Suggestions for the next steps

In order to provide more detailed and expanded recommendations for improvements to the Latvian health promotion program, the following activities are suggested as potential next steps:

#### 1. Study visit(s) in Finland (one or two groups)

- participants
  - health promotion staff (different levels and organizations)
  - political decision makers
  - o representatives of other sectors
- places to visit
  - National Institute for Health and Welfare (coordinating the visit)
  - Ministry of Social Welfare and Health
  - National Institute for Occupational Health
  - o NGO(s) (ASH, Finnish Heart Association, Finnish lung health association, etc.)
  - City/municipality health center
  - The Finnish Cancer Registry
  - o The Parliament, Committee for Social Welfare and Health
- proposed time: September 2015
- the program of the visit will be planned and finalized in collaboration with the National Institute for Health and Welfare (THL) in Finland and the MoH and other organizations in Latvia.

#### 2. Health promotion and NCD prevention seminar in Latvia

- participants
  - core health promotion staff of MoH and CDPC
  - o national and local level health and health promotion professionals
  - o political decision makers (national and local level)
  - representatives of other government sectors, such as Ministry of Welfare,
     Ministry of Education, Ministry of finance, etc.
  - non-governmental organizations
  - private sector
  - press and media
- speakers and facilitators
  - Latvian health promotion experts and political leaders
  - WB health and health promotion experts
  - Finnish speakers familiar with health promotion and disease prevention in Finland and also internationally
  - WHO/WHO Euro staff members
  - The representative of EU SANTE
- proposed time: September-October 2015.

# 3. <u>Identifying additional, sustainable, and predictable sources of funding for health</u> promotion activities

Sin taxes – or taxes on the consumption of substances and services that could be harmful to public health – can serve to both improve lifestyle choices and raise revenue to compensate for the damage to society caused by these goods and services. In Latvia, the current taxes applied to tobacco products meet the WHO's recent recommendation (75% of retail price), and the Ministry of Finance also appears to levy excise taxes on alcohol, gambling, and lotteries. What is not clear, however, is how these "sin revenues" are used in Latvia. In the Philippines, for example, these revenues are used to pay for their Universal Health Care Program and to support tobacco farmers and others who stand to lose from reduced tobacco consumption. In the United States, revenues from state lotteries are often used to fund public education. One option to secure funding for health promotion activities in Latvia would be to allocate a certain percentage of these sin taxes – for example, 2 percent of all tobacco tax revenue – to particular health promotion activities, potentially directly related to tobacco use – for example, to smoking cessation programs.

Another sin tax that might be worth considering in Latvia would be one levied on unhealthy foods – for example, foods that contain a certain percentage of sugar or certain types of fat. While this kind of tax could serve to reduce consumption of unhealthy foods, it could also be highly regressive, given that poorer populations tend to spend a larger fraction of household expenditures on food. This concern could be addressed by targeting restaurants or other vendors above a chosen threshold of revenues. Again, a portion of any resulting revenues would ideally be channeled back into the health system.

Given the current role of Latvia's municipalities in health promotion activities, with funds that come from the central budget, it may also be worth considering implementing a "pay for results" type of program framed as a health "challenge," much like the "Race to the Top" program of the U.S. Department of Education. In this case, municipalities would be rewarded with a payment only *after* meeting certain targets. For example, the Ministry of Health could promise an award if 85 percent of all patients in a certain age range registered with GPs in the municipality have cholesterol levels below a certain level or if 75 percent of children between the ages of 6 and 18 are not classified as obese. Structuring funding in this way puts the burden on municipalities to identify solutions that work locally and ensures that at least a fraction of the central budget for health promotion will not be used towards inputs that turn out to be ineffective.

# Support for the health promotion and disease prevention measures about healthy lifestyle

During whole period (2014-2020) it is planned to carry out 36 programmes about the topics which are related to causes with the biggest impact on health of inhabitants in general thus reducing the life span (based on morbidity and mortality indicators) ie.:

- Reducing spread of addictive substances (alcohol, drugs and tobacco) and processes (games of chance, computer addiction etc.) (including activities as peers education programme development, creating educating short-movies, interactive educating activities for children and youth etc.) – 7 times per period;
- Healthy food promotion (including activities as peers education programme development, interactive educating activities in educational establishments, healthy food promotion programme development and implementation in educational establishments, summer camp organization for children and youth etc.) – 7 times per period;
- Promotion of physical activities in society (ie. creating physical activity interest groups, physical activity popularization programme elaboration and implementation in educational establishments and in work places, swimming lessons for children etc.) – 7 times per period.

The activities in these three fields are aimed at maintaining and improving health status, reducing morbidity in sector of non-communicable diseases (CVD, oncology, mental health networks).

- Reproductive health 3 times per period (prenatal network)
- External mortality causes, traumatism prevention 3 times per period (also mental health network)
- Oral health 3 times per period
- Infection disease prevalence reduction (STDs, tuberculosis, HIV/AIDS, vaccination, hygiene etc.) – 3 times per period
- Mental health (stress management, mental overload, workaholics etc.) 3 times per period

Taking into consideration experience from other EU countries for each of the topic there will be planned a particular programme that contains different measures, providing complex approach to problem solution that e.g. according to experience from Finland where there has been an effective measure implemented to reduce cardio and circulatory diseases. By elaborating each of the programmes there will be analysis of existing situation provided, also, if necessary, providing additional researches for risk groups and identification of their problems and the identification of best practices (of other EU countries and the measures already implemented in Latvia).

Each of the topics will include measures for particular target groups, including children and youth that will be mostly implemented through educational institutions.

Taking into consideration the wide scope of planned activities, in planning and implementation there will be attracted representatives from other sectors as well (e.g. education, transport sector) and local governments, NGOs and social partners. Most of the measures are active and purposefully involve local society e.g. in interest groups in municipalities, peers programme implementation to develop movement where children and youth are addressed by the people of their age thus providing better results. Also, it is planned to organize also particular behaviour popularizing activities in municipalities, e.g. health days. Taking into account that children are the main target group it is planned to create interactive informative educating seminars in educational establishments, to create and implement in educational institutions prophylactic and health promotion programmes, to organise summer camps for children and youth.

For public information programmes there is an ex-post evaluation planned, where usually there is a survey carried out asking weather the complex of measures has motivated to change the habits etc. Additionally the results of the measures will be evaluated with public health monitoring and surveys. For example, after implementation of complex of measures, by informing the inhabitants e.g. not to add salt to food that is already prepared, after that by doing the regular monitoring it will be possible to see how the percentage of people who do not add salt to their meals has changed.

World practice has proven that health promotion programmes and targeted public information activities have good results. For example, North Karelia project was started in Finland in 1972 to reduce very high heart coronary disease mortality indicators in this field. North Karelia project was formulated and implemented to provide overall involvement and activity through local community and the people themselves. There were different measures used by involving health care and other services, schools, NGOs, innovative media campaigns, local media, hypermarkets, food manufacturing, agriculture etc. The results showed that during 25 implementation period there are significant changed that have taken place. Till 1995 mortality from coronary heart diseases (up to 65 years of age) for men in North Karelia has reduced by 73%. Main key to success of the project was involvement of overall society. In Latvia there is a project with very good results that was carried out by RTSD (Road Traffic Safety Directorate) — in the course of time the number of people using safety belts has significantly increased — this was achieved with the complex of measures, information and change in laws.

Measures of prevention for health promotion and disease prevention that are planned to implemented within the framework of the Public Health Strategies from 2014 to 2020 by attracting EU funding. Different types of activities in health promotion and disease prevention are listed in the table below.

Objectives/main steps to achieve the objective	Responsible institution	Participating institutions	Estimated funding and its sources
Educating of local delegated contacts for health	CDPC	MoH, municipalities,	The event will provided by the financial
promotion (health promotion coordinators) and the		NGO	resources stated by law on the state
officials in charge of health promotion and public health			budget for the current year and
issues.			indicative* 2014 to 2020 EU funds
			programming period within the specific aid objective 9.2.4. "Improving access to
			health promotion and disease prevention
			services, especially for populations at risk
			for poverty and social exclusion"
			NAP2020 [311].
			<b>Total</b> - 418 492 euro
			<b>ESF</b> – 355 718 euro
			<b>VB</b> - 62 774 euro
Providing development and coordination of movement	CDPC	MoH, MES, SECC,	According to NAP2020 [311], the
"Health Promoting Schools"		municipalities, NGOs,	financial resources of the movement in
		social partners	2014- 2016 will be provided by law on
			the state budget for the current year –
			budget program 46.00.00 "Health monitoring" subprogram 46.04.00
			"Health Promotion".
			The total funding necessary to
			implement it - 924 869 euro.
Providing advanced technology solutions for interactive	CDPC	MoH, SES, NGO	The event will provided by the financial
health (creation of a health portal, informing the			resources stated by law on the state
population)			budget for the current year and
			indicative* 2014 to 2020 EU funds
			programming period within the specific

Promoting topics of a healthy nutrition in the	MoH, CDPC	MoA, municipalities,	aid objective 9.2.4. "Improving access to health promotion and disease prevention services, especially for populations at risk for poverty and social exclusion"  NAP2020 [311].  Total - 900 000 euro  The event will provided by the financial
especially in the population at risk of social exclusion and poverty) <sup>5</sup> (-interactive informative educational sessions,			budget for the current year and indicative* 2014 to 2020 EU funds programming period within the specific aid objective 9.2.4. "Improving access to health promotion and disease prevention services, especially for populations at risk for poverty and social exclusion" NAP2020 [311].  Total -7 267 880 euros.
of the local government and educational institutions, healthcare professionals, etc.);  – for specific action or possibilities; promotion events in municipalities (organization of a Health Day, etc.);  – promoting a healthy eating program in schools;  – summer camps for teenagers and young people;  – event complex for information of public;  – informational materials and visual aids (posters, magazines, books, brochures, etc.)			

<sup>&</sup>lt;sup>5</sup> Financing health promotion up to 70% will be directed to the municipalities, associations and foundations, providing the involvement of the widest possible public interest group. 30% of the funding are planned to be directed to CDPC as the leading authority in health promotion to ensure methodological management, mutual coordination of events and targeted implementation.

<ul> <li>educating of catering workers, chefs, food technologists and other specialists of social institutions in issues of healthy nutrition);</li> <li>educating in social care and social rehabilitation institutions (youth homes, SOS villages) – current employees and clients (orphans and children left without parental care who learn skills for independent</li> </ul>			
living) of healthy eating issues.			
Promoting physical activities in the community, in particular, for populations at risk of social exclusion and poverty <sup>6</sup> (-interactive informative educational sessions,  - interest groups for population (Nordic walking, jogging, cycling, etc.);  - themed lectures, seminars, experts (representatives of the local government and educational institutions,  - for specific action or possibilities; promotion events in municipalities (organization of a Health Day, etc.);  - short motivational interventions,  - educational activities for the promotion of healthy nutrition in the educational facilities;  - educational activities for the promotion of healthy nutrition in the workplace;  - actions to reduce musculoskeletal diseases;  - summer camps for teenagers and young adults,  - swimming training for children;  - event complex for information of public;  - informational materials and visual aids (posters,	MoH, CDPC	municipalities, NGOs, companies,	The event will provided by the financial resources stated by law on the state budget for the current year and indicative* 2014 to 2020 EU funds programming period within the specific aid objective 9.2.4. "Improving access to health promotion and disease prevention services, especially for populations at risk for poverty and social exclusion" NAP2020 [311].  Total – 20 506 417 euro.

<sup>&</sup>lt;sup>6</sup> Financing health promotion up to 70% will be directed to the municipalities, associations and foundations, providing the involvement of the widest possible public interest group. 30% of the funding are planned to be directed to CDPC as the leading authority in health promotion to ensure methodological management, mutual coordination of events and targeted implementation.

magazines books, booklets, etc.)).			
Reducing prevalence of addictive substances and	MoH, CDPC	municipalities, NGOs,	The event will provided by the financial
processes in society, especially in groups at risk of	,	companies,	resources stated by law on the state
social exclusion and poverty <sup>7</sup>			budget for the current year and
(-interactive informative educational sessions on			indicative* 2014 to 2020 EU funds
addictions of substances and processes			programming period within the specific
<ul> <li>peer education programs, training of peer educators;</li> </ul>			aid objective 9.2.4. "Improving access to
<ul> <li>interest groups for population;</li> </ul>			health promotion and disease prevention
<ul> <li>short motivational interventions,</li> </ul>			services, especially for populations at risk
<ul> <li>educational short films about drugs and the dangers</li> </ul>			for poverty and social exclusion"
of the processes in educational institutions, etc.,			NAP2020 [311].
<ul> <li>themed lectures, seminars, experts (representatives</li> </ul>			Total – 9 059 411 euros.
of the local government and educational institutions,			
health care specialists, policemen etc.);			
<ul> <li>for specific action or possibilities; promotion events</li> </ul>			
in municipalities (organization of a Health Day, etc.);			
<ul> <li>addiction prevention program in educational</li> </ul>			
institutions, including work with the parents of			
students;			
<ul> <li>psychological counseling for children, parents and</li> </ul>			
at-risk groups in order to reduce dependence risk in			
them and to solve the problems associated with causes			
of substance use;			
<ul> <li>summer camps for teenagers and young people,</li> </ul>			
<ul> <li>event complex for information of public;</li> </ul>			
<ul> <li>informational materials and visual aids (posters,</li> </ul>			
magazines, books, brochures, etc.)).			
Promoting mental health in the community, in	MoH, CDPC	municipalities, NGOs,	The event will provided by the financial

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particular, at populations at risk of social exclusion and poverty <sup>8</sup> (-interactive informative educational sessions on mental health in educational institutions, social institutions, social care and social rehabilitation institutions,  - peer education programs, training of peer educators,  - educational short films about mental health issues in educational institutions, etc.,  - themed lectures, seminars, experts (representatives of the local government and educational institutions, health care specialists, etc.);  - mental health promotion program for educational institutions,  - summer camps for teenagers and young people;  - psychological counseling for children and their parents on child behavior problems (neurotic, depressive syndromes, suicidality, worsening of success, etc.);  - event complex for information of public;  - informational materials and visual aids (posters, magazines, books, brochures, etc.)).		companies,	resources stated by law on the state budget for the current year and indicative* 2014 to 2020 EU funds programming period within the specific aid objective 9.2.4. "Improving access to health promotion and disease prevention services, especially for populations at risk for poverty and social exclusion" NAP2020 [311].  Total – 5 068 261 euros.
Promoting sexual and reproductive health in the community, in particular, in populations at risk of social	MoH, CDPC	municipalities, NGOs, companies,	The event will provided by the financial resources stated by law on the state
exclusion and poverty <sup>9</sup> (-interactive informative educational sessions, taking			budget for the current year and indicative* 2014 to 2020 EU funds

<sup>&</sup>lt;sup>8</sup> Financing health promotion up to 70% will be directed to the municipalities, associations and foundations, providing the involvement of the widest possible public interest group. 30% of the funding are planned to be directed to CDPC as the leading authority in health promotion to ensure methodological management, mutual coordination of events and targeted implementation.

<sup>&</sup>lt;sup>9</sup> Financing health promotion up to 70% will be directed to the municipalities, associations and foundations, providing the involvement of the widest possible public interest group. 30% of the funding are planned to be directed to CDPC as the leading authority in health promotion to ensure methodological management, mutual coordination of events and targeted implementation.

into account gender differences;	programming period within the specific
<ul> <li>peer education programs, taking into account gender</li> </ul>	aid objective 9.2.4. "Improving access to
differences in the training of peer educators;	health promotion and disease prevention
<ul> <li>educational short films about sexual and</li> </ul>	services, especially for populations at risk
reproductive health issues in educational institutions,	for poverty and social exclusion"
etc.;	NAP2020 [311].
- themed lectures, seminars, experts (representatives	Total – 7 593 856 euro
of the local government and educational institutions);	
<ul> <li>event complex for information of public;</li> </ul>	
<ul> <li>informational materials and visual aids (posters,</li> </ul>	
magazines, books, brochures, etc.)).	

Example. Programme for reduction of prevalence of addictive substances (alcohol, drugs and tobacco) and processes (gambling, computer addiction etc.) by informing inhabitants about their harm, opportunities to avoid them and cure the addiction – 7 times per period

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
Thematic	50 seminars across	<ul><li>Services of</li></ul>	Municipaliti	Representati	■ 50 seminars x EUR 2 845	■ 50 seminars
lectures,	Latvia. In the frames of	consultants, experts	es, NGOs,	ves from		<ul><li>Number of</li></ul>
seminars	the seminars it is	and specialists;	CDPC <sup>10</sup>	health care		informed specialists
	planned to attract	<ul><li>Services of seminar</li></ul>		and		<b>-</b> 5 000
	specialists from the	programme		educational		

<sup>&</sup>lt;sup>10</sup> Centre for Disease Prevention and Control

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Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	addiction treatment sector to provide information to the representatives from municipalities, health care specialists, representatives from schools and other specialists involved in health promotion to inform and educate them about problems of addictions and their prevention.	elaboration, organisation and implementation; • Services of presentation material, informative material and visual aid elaboration		sector, police	Total EUR 142 250	
Interest groups	It is planned to organise interest groups that will be lead by the addiction field specialists with the aim to give the opportunity for the people to unite, get new knowledge about the opportunities	<ul> <li>Services of consultants, experts and specialists (provision of specialists to lead the interest groups and consult the participants);</li> <li>Services of</li> </ul>	Municipaliti es, NGOs, CDPC <sup>11</sup>	Working age people, teens, youth, social risk groups	premises)	<ul> <li>20 interest groups</li> <li>Number of involved poeple – 3 000</li> <li>Indirect target groups (family members, coaddicts) – 9 000</li> </ul>

<sup>&</sup>lt;sup>11</sup> Centre for Disease Prevention and Control

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	to avoid addiction, to treat (stop) addiction, skills, keeping motivation to change habits, exchange experience (also for parents about their children) also to the groups facing social risk to provide the necessary support to these people	organisation and implementation of the measures			Total EUR 284 600	
Developmen t of peers education programmes	Taking into account that the biggest impact on children and youth has their peers and people of their own age and with peers educators it is possible to achieve very good results, it is planned to create peers educational programme. As the	<ul> <li>Services of consultants, experts and specialists (provision of specialists to peers training);</li> <li>Services of seminar programme elaboration, organisation and implementation;</li> <li>Services of</li> </ul>	Municipaliti es, NGOs, CDPC	Teens, youth	<ul> <li>Programme elaboration –</li> <li>7 115 EUR</li> <li>Programme implementation (services of consultants and specialists) –</li> <li>14 230 EUR</li> </ul>	<ul> <li>(1) peers</li> <li>educating</li> <li>programme</li> <li>elaborated, 50</li> <li>peers educators</li> <li>trained</li> <li>Number of youth</li> <li>that is informed –</li> <li>10 000</li> </ul>

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	result of this programme there will be peers educators trained that will go to educational establishments and will share their experience on healthy life-style (how to spend their spare time, healthy habits etc.)	presentation material, informative material and visual aid elaboration			Total EUR 21 345	
Production and demonstrati on of educational short-movies	Production of short- movies about addictive substances and processes, their harm, demonstration of consequences of these addictions and demonstration of options to make a healthy choice and to avoid addictions. Short-movies are targeted at different	<ul> <li>Services of informative material and visual aid elaboration</li> <li>Services of consultants, experts and specialists</li> </ul>	NGOs, communica tion and PR agencies, CDPC	Working age people, teens, youth	(including script etc.) – 21 345 EUR ■ Distribution of movies in DVD or other formats ( 5000 copies) – 4 270 EUR ■ Distribution of movies in internet, demonstrations on TV - 4 270 EUR	<ul> <li>(1) short-movie made</li> <li>Number of people who have received DVDs – 5 000</li> <li>The coverage of target auditory in 100 séances – 10 000 people</li> </ul>

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	social groups, mainly youth and teens and working age people. It is planned to show the movies in educational establishments etc., and to compliment the demonstration with participation of addiction specialist participation and a discussion. It is planned to produce the movies in DVD or other formats and to distribute them in schools, in internet, demonstration on TV.				transportation costs) – 41 500 EUR  Total – 71 385 EUR	
Interactive informative educational classes	Educational classes include promotion of understanding about addiction of substances	<ul><li>Services of consultants, experts and specialists;</li><li>Services of seminar</li></ul>	Municipaliti es, NGOs, CDPC	Pupils (youth, teens), working age people, social	■ 100 classes x 715 EUR	<ul><li>100 classes</li><li>Number of informed inhabitants – 5 000</li></ul>
	and processes in a form of interactive,	programme elaboration,		risk groups		

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	educational classes. Each class has two parts – theory (types of addictions, impact on body, psyche etc.) and discussion or interactive game for making feedback and consolidation of knowledge. In the classes it is planned to use the practical material that are relevant to the particular age groups.	organisation and implementation; • Services of presentation material, informative material and visual aid elaboration			Total EUR 71 500	
Measures in municipalitie s aimed at popularizatio n of particular behaviour or opportunitie s	Organization of health days in municipalities to involve people, provide them information, motivate them to change lifestyle habits. In the measures there will be attracted addiction	<ul> <li>Services of consultants, experts and specialists;</li> <li>Services of health promotion elaboration plans;</li> <li>Services of health improvement measure implementation;</li> </ul>	Municipaliti es, NGOs, CDPC	Pupils (youth, teens), working age people, social risk groups	10 activities popularizing particular behaviour / opportunities x 10 000	■ 10 activities ■ Coverage of reached target group (non-unique) — 50 000 inhabitants (all measures total, whole Latvia)

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	specialists, police representatives etc. to talk about addiction questions, impact of addictive substances on organism, consequences of purchasing and using prohibited substances in different places where it is not allowed etc. In the activities there are different interactive games, competitions, quizzes used to attract attention, provide knowledge and create understanding about addictions. During the activities participants can be invited to change their cigarette to a fruit or vegetable	<ul> <li>Services of presentation material, informative material and visual aid elaboration</li> </ul>			Total 142 290 EUR	

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	etc.					
Elaboration of addiction prophylaxis programmes and implementat ion in educational establishmen ts	Elaborated and implemented programme example in educational establishments that is aimed at improvement of the school policy in general (including change of behaviour of pupils, inner rules, support for the pupils) to reduce addiction problems	<ul> <li>Services of consultants, experts and specialists;</li> <li>Services of health promotion elaboration plans;</li> <li>Services of health improvement implementation</li> </ul>	Municipaliti es, NGOs, CDPC, educational establishme nts	Pupils (youth, teens), working age people, social risk groups	<ul> <li>Programme elaboration –</li> <li>7 115 EUR</li> <li>Programme implementation (consultant, expert and specialist services) –</li> <li>56 915 EUR</li> </ul> Total 64 030 EUR	<ul> <li>Elaborated one addiction prophylaxis program example for educational establishments</li> <li>Prophylaxis program example implemented in 50 schools</li> <li>Reached target group (non-unique) – 500 000 inhabitants</li> </ul>
Organising summer camps	Summer camps for youth and teens with emphasis on social risk groups. In the camps there are addiction prophylaxis lessons planned and adventure pedagogy as alternative to addictive substances	<ul> <li>Services of consultants, experts and specialists;</li> <li>Services of health promotion elaboration plans</li> </ul>	Municipaliti es, NGOs, CDPC	Pupils (youth, teens), working age people, social risk groups	■ 5 camps x 14 230 EUR  Total 71 150 EUR	<ul> <li>5 camps</li> <li>Number of informed youth -</li> <li>150</li> </ul>

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
Informative materials and visual aids (posters, magazines, books, brochures etc.)	<ul> <li>Elaboration, design, layout design, printing of materials (posters, spreadsheets, brochures)</li> <li>Preparation of e-book (promotion in different portals, internet sites)</li> <li>Series of educational publications in portals</li> <li>Cooperation with informative publications done by municipalities</li> </ul>	<ul> <li>Elaboration of content and design of materials;</li> <li>Typography services (printing);</li> <li>Promotion of materials</li> </ul>	Municipaliti es, NGOs, CDPC, communica tion and PR agencies	Society in general (children, youth, working age people)	<ul> <li>Elaboration, design, layout design, printing of materials (posters, spreadsheets, brochures) – 3 560 EUR</li> <li>Preparation of e-book (promotion in different portals, internet sites) – 640 EUR</li> <li>Series of educational publications in portals – 1 400 EUR</li> <li>Cooperation with informative publications done by municipalities – 780 EUR</li> <li>Total 6 380 EUR</li> </ul>	<ul> <li>One set of informative materials and visual aids</li> <li>Reached target group (non-unique)</li> <li>3 000 000 inhabitants</li> </ul>
Complex of public information measures	In order to improve public health and create negative attitude against addictions, to change public life-style habits it is planned to implement complex of measures by providing	<ul> <li>Services of elaboration, organisation and implementation of activities</li> <li>Services of consultants, experts and specialists</li> </ul>	CDPC, communica tion and PR agencies	Society in general (children, youth, working age people)	<ul> <li>Strategic support, creative concept elaboration EUR 5</li> <li>690</li> <li>Production of video-clips – video-advices (idea, script, production, montage, project management, translation) –</li> <li>17 075 EUR</li> </ul>	<ul> <li>One set of informative materials and visual aids</li> <li>Reached target group (non-unique)</li> <li>3 000 000 inhabitants</li> </ul>

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	information to society in mass media (TV, radio, internet, outdoor commercials). Content of each complex: Strategic support, creative concept elaboration Production of video-clips – video-advices (idea, script, production, montage, project management, translation) Production of audio-clips Production and promotion of mobile applications Social advertisement materials on TV, radio,				<ul> <li>Production of audio-clips (idea, script, two voices, recording) – 10 000 EUR</li> <li>Promotion of social advertisement materials on TV, radio, internet – 15 650 EUR</li> <li>Series of educational publications in internet – 15 650 EUR</li> <li>Outdoor advertising (production and promotion) – 28 450 EUR</li> <li>Communication solutions for smart phones – 7 115 EUR</li> <li>Production and promotion in social networks of informative banners – EUR 4 270</li> <li>Public Relations (including press conferences) – 80 hours</li> </ul>	
	internet Series of educational publications in internet				x 70 EUR 5 600 EUR  Activities in social media – 300 hours x 60 EUR - EUR 18	

Programmas aktivitātes	Apakšaktivitātes	Atbalsta veids	Īstenotāji / iesaistītie	Mērķauditori ja	Finansējums	Iznākuma rādītāji
Programme activities	Sub-activities	Type of support	Implementi ng institutions / involved parties	Target group	Financing	Outcome indicators
	Outdoor advertising (production and promotion) Communication solutions for smart phones Production and promotion in social networks of informative banners Public Relations (including press conferences) Activities in social media				<ul> <li>Cooperation with informative publications done by municipalities – 7 115 EUR</li> <li>Post implementation survey and compilation of results – 7 115 EUR</li> <li>Total EUR 141 730</li> </ul>	
Total for one p	orogramme:	EUR 1 016 650				
Total for progr	ramming period (7 progran	nmes):			EUR 7 116 550	

ANNEX 2 PROPOSED MONITORING FRAMEWORK BY CDPC

Field	Indicator	Indicator	Availability	Usability	Notes	Source	Definition
General	Participation in activities of health promotion	Main	Municipality	Level of municipality	By the municipality	CDPC Department of health promotion	
CVD	Premature mortality from CVD, per 100 000 population	Additional	Municipality	Regional level (municipality -limited)	By the residence of the deceased	Register of causes of death (CDPC)	100-199, 0-64 years of age
CVD	Mortality from CVD, per 100 000 population, standardized by age	Main	Municipality	Level of municipality	By the residence of the deceased	Register of causes of death (CDPC)	100-199, all ages
CVD	Relative number of hospital admissions with primary hypertension per 1000 population	Main	Municipality	Level of municipality	By the residence of the patient	National Health Service MIS (done by CDPC)	I10, all ages
CVD	Proportion of residents who are daily smokers	Additional	Region	Level of region	By the residence of the respondent	Population Health Survey 2008 (CSB) Study of Latvian	Age 15+ 15-64 years of age

						population health habits (2014 CDPC)	
Oncology	Morbidity (incidence) with malignant tumours, per 100 000 population, standardized by age	Main	Municipality	Level of municipality	By the residence of the patient	Registry for patients suffering from certain diseases of patients suffering from oncological diseases (CDPC)	C00-C97
Oncology	Mortality from malignant tumours, per 100 000 population, standardized by age	Main	Municipality	Level of municipality	By the residence of the deceased	Register of causes of death (CDPC)	C00-C97, all ages
Oncology	The proportion of patients with stage III-IV tumours at diagnosis	Additional	Municipality	Regional level (municipality -limited)	By the residence of the patient	Registry for patients suffering from certain diseases of patients suffering from oncological	Of all patients with a first-time diagnosis of malignancy, except for tumour localization with no fixed stage; excluding those

						diseases (CDPC)	who are diagnosed after death
Mental health	The mortality rate from suicide per 100 000 population, standardized by age (only for regions)	Additional	Municipality	Regional level (municipality -limited)	By the residence of the deceased	Register of causes of death (CDPC)	X60-X84, all ages
Mental health	First time registered patients with mental disorders (incidence) per 100 000 inhabitants (without use of psychoactive substances)	Additional	Municipality	Regional level (municipality -limited)	By the residence of the patient	Registry for patients suffering from certain diseases of patients suffering from mental and behavioural disorders (CDPC)	F00-F09; F20- F98 (without use of psychoactive substances)
Mental health	Registered population (prevalence) with mental disorders, as a percentage of the total (without use of	Main	Municipality	Regional level (municipality -limited)	By the residence of the patient	Registry for patients suffering from certain diseases of patients suffering from mental	F00-F09; F20- F98 (without use of psychoactive substances)

	psychoactive substances)					and behavioural disorders (CDPC)	
Mental health	Relative number of patients treatedfor drug use disorders within a year per 100 000 population	Main	Municipality	Regional level (municipality -limited)	By the residence of the patient	Registry for patients suffering from certain diseases of narcology patients (CDPC)	F10-F19, excluding F17 (tobacco)
Mental health	Incidence of first-time registered narcology patients per 100 000 population	Additional	Municipality	Regional level (municipality -limited)	By the residence of the patient	Registry for patients suffering from certain diseases of narcology patients (CDPC)	F10-F19, excluding F17 (tobacco)
Mental health	Outpatient visits to psychiatrists due to mental disorders per 100 000 population	Main	Municipality	Level of municipality	By the residence of the patient	National Health Service MIS (done by CDPC)	F00-F09; F20- F99
Perinatal period	Infant mortality per 1000 live births	Additional	Municipality	Regional level (municipality -limited)	By the residence of the deceased	Register of causes of death (CDPC)	

Perinatal period	Infant mortality per 1000 live and diseased births	Additional	Municipality	Regional level (municipality -limited)	By the residence of the mother of the deceased	CDPC	Stillborn + Dead at the first week
Perinatal period	The proportion of newborns for which at least one disease is diagnosed (at the birth institution)	Main	Municipality	Level of municipality	By the residence of the mother	CDPC, Medical Birth Register	of all live births
Perinatal period	Proportion of full antenatal care	Main	Municipality	Level of region	By the residence of the mother	CDPC, Medical Birth Register	Everything is completed as under the minimum statutory national care (care begun until 12th week; USG, etc.).
Socioeconomical	Proportion of population at risk of poverty	Additional	Region	Region	By the residence of the respondent	CSB	Calculated using the SILC

Socioeconomical	Index of territory development	Main	Municipality	Level of municipality		State Regional Development Agency	The generalized Score, calculated by certain weight or significance factors by summing the key, standardized values characterizing the statistical fundamentals of development of territory (municipalities).
Socioeconomical	Gini index	Additional	Region	Region	By the residence of the respondent	CSB	Calculated using the SILC
Socioeconomical	Number of population	Additional	Municipality	Level of municipality	By the residence of the person	CSB	