THE HEALTH PROFILE OF TALLINN
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Positive developments, problem areas and intervention needs in the health of the population of Tallinn at the end of the first decade of the 21st century

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This document is a short summary of the Health Profile of Tallinn (http://www.tallinn.ee/g4181s51124), analysing the changes in the health of the city’s population and temporal trends in factors affecting health, presenting positive changes and tight spots in the health situation of the city people. The Health Profile of Tallinn will be the basis for defining targets for the future health promotion and for setting up necessary interventions in health promotion in the city.

DEMOGRAPHIC AND GENERAL MORBIDITY RATE DATA

The area of Tallinn is 158.27 km² and the population density is slowly but consistently growing (Figure 1). In 2008, the population density was 2512.27 people per km² and in 2009, 2518.40 people per km². In the last few years, the net migration balance has remained stable.

Figure 1 Population density in Tallinn, ppl./ km²
Source: Population Register
Birth rate in Tallinn has increased (Figure 2) more than in Estonia as a whole and natural population increase has been positive since 2006 (Figure 3).

Average life expectancy at birth has increased both in Estonia as a whole as well as in Tallinn (69.9 years in males and 80.2 years in females), however, it is still alarmingly low compared to other member states of the European Union. The difference between the average life expectancy of males and females in Estonia is one of the largest in the world and has not decreased in the last two decades: males die at a significantly younger age than females. When it comes to healthy life years (the average number of remaining healthy life years at a certain age according to self-assessment and life table), the difference between men and women is relatively small - a mere three years.

On the one hand, this refers to a different pattern of male morbidity and the substantial effect of premature mortality. On the other hand, increased female life expectancy means a longer period of life with limited subsistence.

A positive indicator is a decrease in abortion rates and in the percentage of teenage mothers.
The crude mortality rate of Tallinn residents (number of deaths per 1000 annual average inhabitants in a year) has decreased in the last years in a consistent manner (Figure 4).

Figure 4. Standardised crude mortality rate of Talliners by sex per 100,000 residents.

Males in Tallinn die at a significantly younger age than women (Figures 5 and 6). Male longevity numbers are notably lower and male mortality rate is highest in the men’s age group of 70-74. In females, mortality is corresponding to age linearly.

Figure 5. Number of male deaths in Tallinn by age groups

Figure 6. Number of female deaths in Tallinn by age groups
Up to the year 2006, the percentage of cardiovascular diseases, cancer and injury deaths decreased significantly among the population of Tallinn (Figure 7). Since then the mortality due to cardiovascular diseases and cancer has increased.

![Graph: Mortality ratio in cardiovascular diseases, malignant tumors and injuries per 1000 residents of Tallinn.](image)

From 2002 onwards, the number of deaths caused by external reasons (accidents, poisonings and traumas) has slowly but consistently declined. The number of deaths caused by alcohol poisoning has decreased the most. Nevertheless, these indicators are alarmingly high when compared to other states of the European Union. Injury deaths are one of the main reasons for the deaths in males in their prime working age and in children, totalling 9.4% of all deaths in Estonia in 2006. 50% of males and 30% of women dying between the ages of 1 and 49 years, perished due to injuries. Injuries are namely the main reason why men in Tallinn die at a significantly younger age than women.

According to the Statistics Bureau of Estonia, the frequency of traffic accidents with human casualties has consistently declined in the last decade, particularly in the past few years - although the number of those injured is extraordinarily high, amounting to more than 630 cases in 2009. The number of occupational accidents in Tallinn is high. In 2008, more than 500 occupational accidents were registered.

High prevalence of HIV/AIDS and other infectious diseases in Tallinn population poses a problem, although, a downward trend can be perceived in the last few years (Figure 8).
THE SAFE AND HEALTHY DEVELOPMENT OF CHILDREN AND YOUTH

The basis for good health is formed in childhood. Healthy children are the basis of positive development of the population health. According to the World Health Organization evaluation, helpful improvement in public health performance is achieved by focusing the attention and activities to expecting mothers, infants, children and adolescents. The support of the health and development of children and youth is based on the flexible and efficient partnership between the health, social and educational sector.

Positive trends

- At present the juvenile health in Estonia is better than ever before - the mortality rate of children and adolescents under the age of 20, and especially that of children under the age of 5, has steadily decreased.
- The mortality rate in children under the age of 1 has significantly decreased in Tallinn over the last ten years, amounting to 5.0 cases out of 1000 live births.
- The percentage of infants who were ever breastfed has increased.
- Sexual risk behaviour among adolescents has decreased and increase in students smoking has halted in the past few years. Nevertheless, more than 1/3 of the schoolchildren of Tallinn smoke, 14% of them on daily basis.
- Physical activity of children and youth has increased.
- The occurrence rate of misdemeanours committed by children has decreased.
- The health of the schoolchildren of Tallinn based on self-assessment has consistently improved. In 2007, 90% of male children and 83% of female children considered their health to be very good or good.
Problems

- The rate of immunisation in children in Tallinn is the lowest in Estonia.
- The number of overweight children has consistently risen in the past few years. According to data from 2007, 14% of male and 15% of female children aged 14-15 years are overweight (Figure 9).

![Figure 9. Trends in the occurrence of obesity among the students of Tallinn (%)](image)

- Alcohol consumption among adolescents has steadily increased in the last decade and has become one of the most serious health problems. The use of strong alcoholic beverages among both male and female students of Tallinn aged 14-15 years has increased four times in comparison to the year 1996. The number of students who have experienced inebriation (twice or more in their lives) is consistently growing (Figure 10).

![Figure 10. The occurrence of drunkenness by gender among the students of Tallinn (%)](image)

- The percentage of students who have used illegal drugs at least once in their life has increased to 17%. The use of narcotic substances has notably increased among the Estonian-speaking adolescents.
- 5.1% of the crimes are committed by the minors.

Main courses of action

- Improving child-related awareness and skills of families as early as during the pregnancy, in order to create favourable prerequisites for the well-rounded development of the child.
- Fostering optimal health development in infancy, ensuring timely immunisation, counselling, early detection of health problems and intervention thereof as well as supporting breastfeeding and supporting the caring relationships in families.
- Ensuring the timely immunisation, counselling, early detection of health problems and intervention.
- Fostering the opportunity of the children to grow in a safe, health supporting and promoting domestic and kindergarten environment.
THE HEALTHY LIFESTYLE OF ADULTS

One of the best indicators of the quality of life is people’s self-assessment of their state of health. Choices influencing the health of an individual – smoking, unbalanced diet, alcohol abuse in conjunction with physical inactivity – significantly increase the morbidity risk of several non-infectious diseases (cardiovascular diseases, cancer etc).

Positive trends

- The dietary habits of Tallinn residents have become healthier: the daily consumption of fresh fruits and vegetables has increased.
- There is a downward trend in the prevalence of smoking in Tallinn population in the last decade; there is also a notable reduction in stay in smoke infested public and work environments.
- Sexual behaviour has become safer. In the 35-44 age group, the use of condom during casual encounters increased from 20% to 75%, and in the 45-54 age group, from 11% to 36%.
- The percentage of the population engaged in recreational sport has increased.
- Positive changes can be detected in traffic behaviour. In 2008, 94% of males and 98% of females in Tallinn used a seat belt when driving a car and respectively 94% and 97% of the passengers fastened a seat belt.
- According to the self-assessment of respondents, the health of Tallinn residents has improved. Up to 53% of Tallinn population assess their health to be good or very good. People are significantly more often interested in their health indicators.

Problems

- Overweight is a developing problem. In the years 2004-2008, the percentage of overweight/obese males has increased from 44% to 53% and the percentage of overweight women from 39% to 44%.
- The health behaviour of Tallinn population has improved, but their physical activity is still low. Only 1/3 of Tallinn residents engage in recreational sport at least once a week.
- The proportion of pregnant women who are smoking has increased.
- Tallinn residents consume large amounts of alcohol. 45% of males and 15% of females consume alcoholic beverages several times per week. In the years 2006-2008, alcohol consumption has increased among young men and women over the age of 45: from 32% to 43% among men aged 16-24 years and from 39% to 53% among men aged 25-34 years.
Main courses of action

- Promoting choices supporting the health of children and youth.
- Achieving a decrease in the use of addictive substances (smoking, alcohol, illegal drugs).
- Promoting safe sexual practices in order to decrease the prevalence of sexually transmitted diseases.
- Promoting safe behaviour in traffic, everyday life and at leisure in Tallinn population.
- Promoting modes of transport that are healthy and environmentally friendly.
- Improving the environmental awareness of the city’s population.

There number of users of illegal drugs among the males and females of Tallinn is higher than in Estonia on average. According to the data from 2008, more than 1/3 of the males in Tallinn aged 16-34 years has experimented with and/or used illegal drugs.
SOCIAL COHESION AND EQUAL OPPORTUNITIES

Social cohesion denotes a consistent process of joint endeavours based on social trust, sense of security, reciprocity, shared values and equal opportunities in structuring the society.

In the situation of economic recession, the health of socially vulnerable people is foremostly threatened. Several risk groups can be distinguished among the people of lower socioeconomic status: the unemployed and the households of the unemployed, families with many children and single parent families, disabled people and the elderly.

The worsening of the situation in the labour market has a negative impact on the work-related quality of life of people. Becoming unemployed and staying unemployed are the main risk factors in falling into and remaining in poverty.

Positive trends

- The relative poverty in Tallinn is smaller than in the rest of Estonia.
- The city guarantees temporary housing and a residence along with the related social services for people with advanced difficulties in coping.
- The city provides welfare sector catering, emergency social aid, rehabilitation services and legal counselling for socially vulnerable groups and people released from prison.
- The quality and availability of services provided for disabled people have improved year after year.
- Home care services, general home nursing services, and services for the families are provided for the elderly.

Problem areas

- The employment rate in Tallinn consistently declined in the years 2008-2010, and the registered unemployment increased.
- The rate of socially vulnerable people has increased fast and poverty has deepened in the last few years both in Tallinn and in Estonia as a whole. 11% of the Tallinn population is living in relative poverty.
- The percentage of disabled people has increased, amounting to 6% of the population of Tallinn in 2006, and their poverty and health risks are high.
- From 2008, the number of people requiring welfare support and social support has increased steeply.
- Only 25% of the men and 26% of the women in Tallinn participate in various networks, community activities and social organisations. Tallinn residents assess their ability to engage in the management of local and health problems of their home communities to be low.
- 6-7% of Tallinn population lacks health insurance.
Main courses of action

- Reaching a significantly more widespread involvement and participation of the city’s population in determining the health needs of their neighbourhoods and communities, in problem solving and in increasing the prospects for health promotion.
- Ensuring the availability of economic welfare in times of economic recession to families with children and socially vulnerable groups of the Tallinn inhabitants.
- Achieving a significant increase in corporate responsibility of organisations and enterprises and in their ability to develop their employees’ health in a planned manner.
- Promoting an increase of employment rate among the working age population.
HEALTHY LIVING AND WORKING ENVIRONMENT

The quality of the living environment establishes the prerequisites for health promotion. Environmental factors - predominantly physical, chemical and biological factors - may have an adverse impact on people’s health either directly or indirectly via the deterioration of their living environment.

Positive trends

- Tallinn’s urban environment has become more health friendly in the past few years. Most of the school buildings have been renovated or repaired; new light-traffic roads and playgrounds for children’s and families have been constructed.
- The projects for yards clean-up ("Hoovid korda"), façades renovation ("Fassaadid korda"), “Nordic Pearl of Light”, the Tallinn Flower Fair etc have successfully been initiated.
- 90% of Tallinn residents have clean and good-quality drinking water at their daily disposal, originating from the Ülemiste water treatment plant. Three national stationary external air monitoring stations have been installed in Tallinn in order to monitor the quality of air.
- The illumination of streets and pedestrian crossings’ is being systematically developed. Coast guard services have been expanded at the public beaches, devoting special attention to the safety of children.
- The crime rate per 1000 people has fallen from 63 occurrences to 48 occurrences.
- The number of traffic related criminal offences and fires has consistently decreased. The number of people perished in fires has decreased significantly - from 24 occurrences in 2006 to 12 occurrences in 2009.
- Crisis management and emergency plans are regularly updated.
Problems

- The air of Tallinn is for the most part clean, but according to the monitoring data, there are occurrences in the springtime when the level of fine particles has exceeded the limits at major traffic crossings.
- There is heightened level of noise on the city streets, especially in the vicinity of railways and main artery roads. The number of motor vehicles is increasing consistently.
- 10% of Tallinn population is consuming drinking water drawn from bore wells, the radium levels of which at times are not in compliance with the regulations, exceeding the permissible levels 2-3 times. There is a problem with the pollution of the water of Harku Lake by the polluted water rich in nutrients flowing in through adjoining streams and inlets.
- The system for handing contagious waste requires updating.
- Some kindergartens of the City Centre of Tallinn lack a territory with a playground.
- In certain neighbourhoods of Tallinn is a scarcity of green and recreational areas.
- Security has decreased during the economic recession - in 2008, the number of offences against persons increased precipitously. More than 800 occurrences of driving while intoxicated (DWI) in motor vehicles were ascertained.
- Alcohol is readily available in Tallinn - as of 31.03.2010, there were 545 companies trading in alcoholic beverages registered in Tallinn. Advertising for alcohol in television and print media increased twofold in the years 2003-2007.
Main courses of action

- Limiting the number of point of sales of alcoholic beverages in the city.
- Ensuring the consistent decrease of the harmful impacts of transportation (exhaust emissions, noise pollution etc).
- Providing quality drinking water for entire Tallinn population.
- Ensuring the availability of required quality of the food and swimming opportunity for pre-school and schoolchildren at educational institutions.
- Ensuring the expansion of green and recreational areas in the city and ensuring the maintenance thereof.
- Ensuring higher level of the safety of the traffic environment surrounding the residential areas, schools and child care institutions.
- Integrating the health promotion school/workplace measures to support the health of schoolchildren and adults in their school/work environment.
- Promoting constant improvement of security and safety in the urban environment.
HEALTH SERVICES

The availability and quality of health and medical services is directly related to the health of the population. The better the quality and availability of the services, the higher the likelihood that the population’s health is preserved and improves.

Positive trends

- Tallinn residents are guaranteed basic counselling/therapy services (sexual, family, dietary, HIV/AIDS and narcotic substance abuse, smoking cessation, counselling for people released from prison etc). The service providers run the practices in the clinics, guidance centres, health centres and private practices, and there are also sole proprietors. Internet counselling functions well. Family physicians provide consultations within the limits of their respective competency.
- Information about the services endorsed by the city of Tallinn is available from the official website of the city.
- Quality specialised medical care is guaranteed together with the availability of required tests and examinations at the municipal medical institutions.
- The availability of general medical care and in-patient treatment for people without health insurance has been provided.
- Patients with chronic health disorders receive home nursing/ personal care.
- Residents’ satisfaction with emergency medical services has remained at high levels throughout the years.

Problems

- The availability of general medical care and in-patient treatment for people without health insurance, and medical services for people in nursing homes, and the financing of these services have not been solved at a national level.
- Current legislation does not permit to employ family physicians on the days off and national holidays, which increases the work load of the employees of emergency medical services and hospital receptions.
- Aid money from the Estonian Health Insurance Fund and the resources of the Tallinn city budget do not cover all persons requiring home nursing care, taking into account the aging of the population and the increase in the number of persons who are going to need the service.
- One of Europe’s largest out-of-pocket rates in paying for prescription medication makes such medication unavailable for the people of lower income.
Main courses of action

- Promoting the choices supporting the health of children and youth.
- Achieving decrease in the use of addictive substances (smoking, alcohol, illegal drugs).
- Promoting safe sexual practices in order to decrease the prevalence of sexually transmitted diseases.
- Promoting the safe behaviour of Tallinn residents in traffic, everyday life and at leisure.
The main areas of activity, objectives, sub-objectives and measures are provided by the Tallinn Population Health Development Plan from 2008 to 2015 (approved by Tallinn City Council Regulation No 66 of 17 April 2008; https://oigusaktid.tallinn.ee/?id=3001&aktid=111002). The Development Plan serves as the guidance paper for the governments of the Tallinn city and city districts and for all the relevant persons, groups and organisations whose activities have an impact on the health and well-being of Tallinn population.