The purpose of this policy brief is to form key messages that can serve as a basis for data-based political decisions, measures and programmes. It was created with the intention to efficiently use research findings in policy planning.
HEALTH BEHAVIOUR OF ADOLESCENTS IN SLOVENIA – CHALLENGES AND RESPONSES

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Foreword

The Health Behaviour in Adolescents in Slovenia – Challenges and Responses policy summary represents an important new contribution to the field in Slovenia. In addition to providing a brief and concise overview of key findings of three cross-national studies (Health Behaviour in School-Aged Children, HBSC), which we carried out in 2002, 2006 and 2010 among 11-, 13- and 15-year-old Slovenian adolescents and an overview of some other studies regarding health behaviours among Slovenian adolescents, the study also provides an overview of the necessary policy measures for health promotion and setting up environments with a positive impact on health.

When analysing the data collected within the framework of the aforementioned studies, our experts and researchers recognized certain fields that require immediate action. Regardless of the fact that some of the problems may not be new, they could be brought to the forefront as more attention is paid to unacceptable health inequalities.

In choosing policy actions we focused on those that have been recognised as effective and could be introduced relatively quickly. The trend analysis itself enabled us to gain a better insight into what has been happening in the selected fields of adolescents' health behaviour in Slovenia during the last eight years, as well as to evaluate the measures that were introduced to improve the adolescents’ health. When writing the previous publication, our colleagues already planned this publication that would serve as a basis for guidelines and determining priority fields of health promotion and preventive actions in adolescents.

The Health Behaviour in Adolescents in Slovenia – Challenges and Responses publication thus represents one of the first policy briefs or summaries of this kind in our country aimed at decision-makers at various
levels of decision-making in Slovenia. We hope that the publication will contribute to greater recognition of issues related to some adolescent behaviours with a decisive impact on health, as well as indicate possible measures.

I would again like to thank everyone who has enabled an insight into this important field by taking part in the studies and funding them – the researchers and technical assistants for carrying out the surveys and analyses and, last but not least, all of you who will use the findings of this study in designing new approaches and measures for promoting and improving adolescent health.

Marija Seljak, MSc
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The aim of this publication is to present the main challenges and proposed measures in the field of health behaviours among adolescents in Slovenia as they follow from the Health Behaviour in School-Aged Children (HBSC) cross-national study. We conducted this survey in Slovenia in 2002, 2006 and 2010 with financial support of the Ministry of Health. It presents the principal health behaviours, including life style, risk behaviours, self-rated health and social context. The study is divided into two sections: the first section focuses on changes that occurred in the last decade, on findings of the latest 2010 survey, on cross-national comparisons and differences in behaviour disparities that are unjust and can be prevented. The second part is oriented towards presenting the proposals for some of the main measures that can contribute to the preservation or improvement of the current status in presented areas.

The publication is aimed at political decision-makers and all who manage health and health behaviours in children and adolescents.

As already mentioned, our starting point in writing this publication were the data presented in the Health Behaviour in School-Aged Children (HBSC) cross-national study. It is already conducted in 43 European and North-American countries every 4 years. In Slovenia, it encompasses a national representative sample of school-attending 11-, 13- and 15-year-old adolescents; the study encompassed 4514 respondents in 2002, 5130 respondents in 2006 and 5436 respondents in 2010.

With regard to differences in health behaviours, we monitored the association between health behaviours and socioeconomic position, school performance, selected secondary school programme and number of friends. In the study, socioeconomic position refers to the four indicators
used to measure it: the “Family Affluence Scale” (FAS), a subjective estimate of family affluence, family type and parents’ occupational status.

Whenever the text mentions differences, it is referring to statistically significant differences. Whenever the term adolescent is used (in relation to the survey), it refers to the entire sample of 11-, 13- and 15-year-olds participating in the survey.

In the chapter on Risk Behaviours, we also used data from the European School Survey Project on Alcohol and Other Drugs, ESPAD, which is a longitudinal study and of key importance in monitoring tobacco, alcohol and other drug use among 15- and 16-year-olds.
SUMMARY

Investing in health is crucial for the progress of society and economic growth. The government has at its disposal numerous effective measures and approaches that can also be affordable and enable efficient health promotion and problem solving in the field of health behaviours to which we draw attention in this publication. Proposed measures are presented in a table following this summary.

Observing the dietary habits of Slovenian adolescents, we find a low proportion of adolescents who regularly eat breakfast during the week. Adolescents also do not eat enough fruit and vegetables, but do enjoy sweets and sugar-sweetened beverages. This ranks Slovenian adolescents at the very bottom on the international scale of regular breakfast consumption, and on the top of the international scale measuring frequent consumption of sugar-sweetened beverages. Observing oral health in the last decade, we have noted an increase in regular tooth brushing, however, the number of adolescents with healthy teeth has been decreasing. As far as physical activity is concerned, we find that the majority of Slovenian adolescents do not meet the physical activity guidelines. The fact that a steady decline of regular physical activity in adolescents was noted in the past decade gives cause for concern.

Risk behaviours (tobacco, alcohol and cannabis use, sexual behaviour, violence) are a widespread phenomenon amongst adolescents in Slovenia; they already occur at an early age and present an important problem. They are more common among boys. Older adolescents exceed the international average in alcohol and cannabis use. In the last decade, alcohol use and bullying have been increasing. While a general decline in tobacco and cannabis use has been noted in the same period, a more detailed analysis shows that in the second half of the last decade, cannabis use increased, as
has the percentage of smokers among girls – one of few changes in tobacco use.

The majority of adolescents in Slovenia are satisfied with their life and report good or excellent health. Moreover, adolescents rarely experience psychosomatic symptoms such as stomach ache, back pain, nervousness, irritability, etc. A less favourable finding is that almost one third of adolescents experience feelings of depression and have a low health-related quality of life. In the past year, our adolescents experienced a greater number of medically attended injuries than the average in other countries; moreover, injuries are the greatest cause of mortality and are an important cause of morbidity in school-aged children and adolescents. Regarding the proportion of those who consider themselves obese, we rank close to the top among the countries participating in the survey. The proportions of those who consider themselves obese and are following diets are increasing in boys in particular.

The majority of adolescents in Slovenia have good communication with their parents and peers, although ease of communication has declined in the last decade. The proportion of adolescents with a several close friends is high and has been increasing in the last years; on the other hand, Slovenian adolescents spend fewer evenings out with friends than their peers in other countries. Almost half of adolescents in Slovenia consider themselves pressured by schoolwork. In the last decade, we also noted an increase in school dissatisfaction with school, whereby younger adolescents like school considerably less than their peers in other countries. At the same time, adolescents in Slovenia feel more pressured by schoolwork than their peers in other countries.

Lower socioeconomic position of the family, weaker school performance in elementary school and choice of a less demanding secondary school programme all exert a negative influence on self-rated health and the majority of health behaviours.
### Table 1: Selection of Priority Measures

| Legislative measures | - Restricting the marketing of unhealthy food and beverages to children and adolescents, with special protection against marketing at schools (banning advertising, banning snack vending machines and banning prize contests).
|                      | - Maintaining and improving the system of school-provided meals, as regulated by law (by preserving school kitchen facilities, with the option of consuming all recommended meals during school time or extended stay and including locally sourced food).
|                      | - Increasing the availability of healthy dietary choices (fruit, vegetables, dairy products, etc.) for all schools, especially from environmentally friendly local production and processing with optimal use of EU financial assistance.
|                      | - Setting the minimal standards and conditions for ensuring safety and preventing injuries.
|                      | - Substantially increasing the taxation and consequently the prices of tobacco products and alcoholic beverages.
|                      | - Introducing a total ban on advertising and point of sale displays for tobacco products and an appropriate restriction or total ban on advertising of alcoholic beverages.
|                      | - Banning tobacco industry donations and alcohol industry sponsorships and donations.
|                      | - Reducing the availability of tobacco products and alcoholic beverages (for instance by introducing licensing of tobacco retailers, limitations on quantity, location and type of tobacco retailers, and limitations in promotion campaigns in case of alcoholic beverages) as well as cannabis.
|                      | - Introducing more effective health warnings on tobacco products (pictorial health warnings on both sides of the package, substantially increasing the size of the warnings, replacing quantitative with qualitative descriptions of emissions, etc.).
|                      | - Introducing a ban on sale of flavoured tobacco products (sweet, fruity, fresh, etc.) and ban on certain other additives in tobacco products.
|                      | - Limiting and regulating the promotion and sales of cannabis products and products containing cannabis, as well as the tools for cannabis cultivation and use, with the aim of differentiating between cannabis and industrial hemp.
|                      | - Introducing an appropriate (progressive) penalty policy in relation to specific measures.
|                      | - Ensuring a regular and planned evaluation of measures and programmes.
| Measures within the framework of the school system | - Introducing new or expanding the existing health and health behaviour topics in the curricula (*see footnote) of elementary and secondary schools and implementing them with the objective to provide a uniform standard of knowledge, skills and competences, including an appropriate system for instructor training.
|                      | - Implementing healthy habits in the school environment (breakfast clubs, serving areas offering fruits and vegetables, school orchards and vegetable gardens with learning workshops, linking with local producers, constant access to drinking water, an additional PE class, applying “learning through movement” method, active methods of coming to school, recreational recess during classes, promotion
of personal hygiene, health oriented extra-curricular activities, facilitating the cooperation between parents and the local community in activities aimed at promoting a healthy lifestyle).
- Investigating the underlying reasons for disliking school and feeling pressured by schoolwork and developing appropriate measures.
- Harmonizing the criteria for selecting external providers of health education (entering the school environment) and harmonizing the standards and criteria regarding contents and methods of implementation.

### Measures within the framework of the health system
- Harmonizing, updating, standardizing, monitoring and evaluating the contents of health education (*see footnote) within the framework of parent education and preventive check-ups for preschool- and school-children, adolescents and students, including a greater engagement of the health sector in schools and an appropriate system of instructor training.
- Preparing and introducing a personal parental consulting programme in the field of injury prevention at home, in traffic and during leisure time.

### Measures within the family
- Developing and introducing programmes for high-quality family relationships and appropriate ways of confronting current challenges (i.e. obesity, injuries, mental health problems and special needs).
- Developing approaches for raising parental awareness and preparing public health recommendations on risks of electronic communication and risks of using modern communication technologies, as well as health risk factors, injuries and protective factors.

### Other measures on the national level
- Increasing the affordability of healthier food such as fruits and vegetables, along with setting up conditions and initiatives for transforming the nutritional composition of foods into healthier alternatives, focusing on those unhealthy foods that are especially popular among children and adolescents.
- Introducing promotional programmes for increasing a general culture of safe physical activity, including measures like subsidies, free training programmes and free access to indoor recreational facilities that will make physical activity more accessible also to adolescents from families with a lower socioeconomic position and to families in general.
- Introducing programmes for improving community safety levels along with a combination of strategies for changing behaviour and the environment.

### Measures specific to gender and higher risk groups
- Introducing specific programmes for promoting safe physical activity in girls.
- Developing and introducing health promotion programmes and programmes for enhancing social skills and health behaviours (*see footnote) for school dropouts.
- Introducing social policy measures aimed at reducing social inequalities between families and consequently between adolescents.

### Measures in the field of industry and media
- Sensitizing journalists to a more critical and responsible way of reporting on health topics (especially delicate issues) and directing them towards promoting health promotion principles.
- Informing and raising awareness of the general public and adolescents about industry and media influence.

*Healthy lifestyle and personal hygiene, positive mental health, social skills and competences, good interpersonal relationships, media education, education for sexual health and partner relationships, risk behaviours, safety, injuries, first aid, environmental factors.*
KEY FINDINGS

Key findings present a summary of the current situation and inequalities in main health behaviours:

- lifestyle (dietary habits, oral health, physical activity),
- risk behaviours (tobacco, alcohol and cannabis use, sexual behaviour, violence),
- self-rated health, injuries, body image, weight-reduction behaviour, and
- social context (communication with parents and peers, socializing with peers, liking school and feeling pressured by schoolwork).

Lifestyle

Regarding dietary habits, we find that 56% of adolescents in Slovenia do not eat breakfast regularly during the week, while the percentages of adolescents who do not eat fruit and vegetables regularly amount to 60% and 75%, respectively. Breakfast is the meal that adolescents skip most frequently; skipping breakfast increases with age. Although we have noted an increase in regular breakfast consumption in the last decade, Slovenian adolescents rank last on the international scale in all three age groups. This can be partially explained by good availability of school-provided mid-morning meals. Slovenian adolescents consume fruit more regularly than vegetables. Regular consumption of both fruit and vegetables declines with age, and girls consume both to a larger degree than boys. In the last decade, an increase in regular consumption of fruit and vegetables was noted only among 11-year-olds.

Slovenian adolescents like to reach for less healthy food; 37% of them regularly consume sugar-sweetened beverages and 25% regularly consume sweets. Frequent consumption of both unhealthy foods increases with age. Boys consume sugar-sweetened beverages more frequently than girls. Regarding the frequency of consumption of sugar-sweetened
beverages, Slovenian adolescents rank at the very top of the international scale. In the last decade, we noted a decline in the proportion of girls who follow the recommendations on consumption of sweets.

In the category of oral health, Slovenian adolescents rank about average in comparison to peers from other countries and 64% of them meet the recommendations on regular tooth brushing. The greatest proportion of those who brush teeth regularly is among 11-year olds, and the lowest among 13-year-olds. We also found that the proportion of those who brush their teeth regularly is higher in girls than in boys. In the last decade, we noted an increase in regular tooth brushing, with the exception of 13-year olds and 11-year-old girls, where no changes were observed.

When observing physical activity and time spent watching TV, we found that the majority (80%) of Slovenian adolescents fail to meet the recommendations on physical activity; however, nearly 70% of adolescents meet the recommendations regarding the time spent watching TV. A decline in regular physical activity in adolescents during the last decade gives cause for concern, particularly as this trend can also be observed among boys and 11-year-olds, who are generally the most physically active. Despite the low proportions of individuals that are regularly physically active, Slovenian adolescents rank slightly above the average of peers from other countries. In the last decade, we have noted a decline in the time spent watching TV, but we cannot conclude that sedentary behaviours in general are decreasing. It is more likely that adolescents switch from watching TV to other sedentary behaviours.

**Risk behaviours**

Risk behaviours (tobacco, alcohol and cannabis use, sexual behaviour and violence) are a widespread phenomenon among the adolescents in Slovenia. They already occur at an early age and present an important problem.
Alcohol and tobacco use increase with age and prevail among 15-year-olds, while the highest degree of violence is noted among 13-year-olds. 27% of 15-year-olds regularly drink alcoholic beverages (once a week or more frequently), 19% regularly smoke tobacco products and 23% have already used cannabis. The majority of adolescents find that tobacco products, alcoholic beverages and cannabis are easily available. 29% of 15-year-olds are sexually active and 9–10% are frequently involved in fighting or bullying their peers.

Risk behaviours are more common among boys, with the exception of smoking, where there are few gender differences.

Among younger adolescents (11- and 13-year-olds), the prevalence of risk behaviours does not exceed the international average while 15-year-olds primarily exceed the average in alcohol and cannabis use.

In the last decade, we have noted that the proportions of individuals who start drinking alcohol at an early age and the number of those who engage in bullying have increased in adolescents of both genders. In girls, we have also noted an increase in drunkenness and the proportion of sexually active individuals. While a general decline in tobacco and cannabis use has been noted in the same period, a more detailed analysis shows that in the second half of the last decade, cannabis use has increased, as has the percentage of smokers among girls – one of few changes in tobacco use.

**Self-rated health, injuries, body image and weight-reduction behaviour**

The majority of adolescents (90%) report their health as good and are also satisfied with their life (87%), which ranks Slovenia highly, even compared to international averages. Girls self-rate their health as poorer and are less satisfied with their life than boys. The proportions of adolescents with lower self-health and lower life satisfaction increases with age.

Data also show that 17% of adolescents experience multiple psychosomatic symptoms, such as stomach ache, back pain, feeling low,
irritability, nervousness, insomnia, etc. These symptoms are more frequent in girls than in boys. The proportion of adolescents who experience multiple psychosomatic symptoms has declined in the last decade and is lower than the international average. Nevertheless, 29% of adolescents experience feelings of depression and 33% consider their health related quality of life to be low.

In the past year, Slovenian adolescents suffered injuries more frequently than is the average in other countries. Approximately 47% of respondents reported at least one injury a year. Boys injured themselves more frequently than girls. Injury rates were higher among 13-year-olds, and lowest among 15-year-olds. In general, injuries are the predominant cause of mortality in Slovenia and an important cause of morbidity in children and adolescents.

39% of adolescents report that they are overweight. This proportion is higher among girls than among boys, however, the proportions of boys reporting that they are overweight have been increasing in the past years. In terms of self-rated overweight, Slovenia ranks at the very top among all the countries participating in the survey.

13% of adolescents report being on a diet. This proportion is higher among girls than among boys; however, the proportion of boys on a weight loss regime has been increasing in the past decade. The percentage of adolescents on any kind of a weight loss regime increases with age. Compared to the international average, Slovenia ranks approximately in the middle or around the average of all participating countries.

**Social context**

We find that the majority of adolescents in Slovenia find it easy to talk to their parents and peers about things that interest them; however, in the past decade, we have noted a declining trend.

The majority of Slovenian adolescents (89%) have several (three or more) close friends; and 16% report frequently (at least 4 evenings a week)
spending evenings out with friends. In the last decade, we have noted an increase in the proportion of adolescents with a greater number of close friendships; while at the same time, the frequency of evenings out has decreased. In comparison with peers in other countries, Slovenian adolescents ranked below average in all age groups with regard to frequent evenings out with friends.

Slightly over a quarter (28%) of adolescents like school a lot. The proportion of adolescents dissatisfied with school is the highest among 13-year-olds and lowest among 15-year-olds. In the last decade, we have noted an increase in disliking school; also less favourable is the fact that 11- and 13-year-olds like school much less than their peers in other countries. On an international level, 13-year-olds ranked among the five most dissatisfied.

As much as approximately half (49%) of Slovenian adolescents report being pressured by schoolwork. There are no gender differences and the proportion of those that report being pressured is highest among 13-year-olds. In the past decade, no changes were noted in self-reported feelings of being pressured by schoolwork; however, compared to their peers in other countries, adolescents in all age groups feel pressured by schoolwork.

**Socioeconomic factors**

Lower socioeconomic position of the family, weaker school performance in elementary school and choice of a less demanding secondary school programme all exert a negative influence on self-reported health and the majority of health behaviours in adolescents. The socioeconomic position of the Slovenian population has been declining in the past years, which may increase the existing inequalities among adolescents.

**Measures**

The government has at its disposal numerous effective measures and approaches for successful health promotion and problem solving in the field of health behaviours to which we draw attention in this publication. The proposed priority measures are presented in Table 1, pages 10 and 11.
LIFESTYLE

Health behaviours, such as dietary habits, physical activity, sedentary behaviours and brushing teeth are formed early in the childhood and adolescence and are maintained into adulthood. They are very important for children and adolescents since they influence their health, general well-being, long-term health, productivity and quality of life; moreover, they are associated with the majority of chronic non-communicable diseases and their early development.

Among the predominant risk factors for early mortality and loss of healthy life years in Slovenia, insufficient physical activity takes the 6th place and insufficient fruit and vegetable consumption take the 7th place.

DIETARY HABITS

Regarding regular breakfast consumption, Slovenian adolescents rank last in comparison to their peers from other countries

Breakfast is the meal that adolescents in Slovenia skip most frequently, only 44% of adolescents eat breakfast daily during the week. Regular breakfast consumption declines with age (Figure 1). In terms of regular breakfast consumption, adolescents in Slovenia rank last among the countries participating in the survey, in all three age groups. This can be partially explained by good availability of the school-provided mid-morning meals. In the last decade, we have noted an increase in regular breakfast consumption during the week, with the exception of 15-year-olds, but the positive changes originate primarily from the first part of the decade, while no changes were noted in the second part.
Adolescents prefer fruit over vegetables; girls consume both more frequently than boys
Adolescents in Slovenia more frequently regularly consume fruit than vegetables – 40% of adolescents consume fruit at least once a day, while only 25% consume vegetables at least once a day (Figure 1). Regular consumption of fruit and vegetables declines with age. In all age groups, girls consume fruit and vegetables more frequently than boys. In terms of regular fruit consumption, 11-year-olds rank above the average of peers in other countries. Among 13- and 15-year-olds, Slovenia ranks average (Figure 2). In the last decade, we have noted an increase in regular fruit and vegetable consumption among 11-year-olds in total, as well as in 11-year-old girls; in 11-year-old boys, we have only noted an increase in vegetable consumption.

Slovenian adolescents, particularly boys, stand out with regard to frequency of consumption of sugar-sweetened beverages
37% of adolescents frequently consume sugar-sweetened beverages (at least once a day) and 25% frequently consume sweets. The consumption of sugar-sweetened beverages and sweets increases with age. Boys consume sugar-sweetened beverages more often than girls; this particularly applies to 15-year-old boys. Girls consume sweets more frequently than boys. In terms of frequent consumption of sugar-sweetened beverages, Slovenian adolescents rank well above the international average (Figure 2). On the international scale, Slovenian 11-year-olds rank second, 13-year-olds rank third and 15-year-olds even first. In the past decade, we have noted no changes in infrequent (once a week or less) consumption of sugar-sweetened beverages and sweets, with the exception of girls in total and 15-year-old girls, where we have noted a decrease in rare consumption of sweets.
ORAL HEALTH

Girls take better care of their teeth than boys, oral hygiene poorest among 13-year-olds

Recommendations on regular tooth brushing (more than once a day) are met by 64% of adolescents. The highest proportion of adolescents who brush their teeth regularly is among 11-year-olds and the lowest among 13-year-olds (Figure 1). In all age groups, the proportion of girls who brush their teeth regularly is higher than the proportion of boys. In terms of regular tooth brushing, Slovenian adolescents rank close to the international average (Figure 2). In the last decade, we have noted an increase in regular tooth brushing in Slovenian adolescents, with the exception of the 13-years age group and 11-year-old girls, where no changes were noted. It should be pointed out that according to the data obtained in the Slovenian periodical survey, the number of adolescents with healthy teeth has been declining since 1998.

PHYSICAL ACTIVITY AND WATCHING TELEVISION

The majority of adolescents are insufficiently physically active

Only 20% of adolescents in Slovenia meet the recommendations on physical activity (at least 60 minutes of moderate-to-vigorous physical activity daily). Regular physical activity declines with age (Figure 1). Boys are more physically active than girls in all age groups. In terms of regular physical activity, Slovenian adolescents rank slightly above the international average; however, the proportions of individuals that are regularly physically active are extremely low, especially in the group of 15-year-old girls, where only 10% are regularly physically active. In the last decade, a decline in regular physical activity was noted in Slovenian adolescents. It should be pointed out that the decline also occurred in groups which were traditionally the most active – in boys and among 11-year-olds.
Time spent watching TV not a cause for concern

During the week, almost 70% of adolescents watch television in accordance with the recommendations (no more than two hours per day). Girls and 15-year-olds spend less time watching TV than boys and 11-year-olds. In terms of time spent watching TV that exceeds the recommendations (two or more hours per day), Slovenian 11- and 13-year-olds rank within the average of peers in other countries, while 15-year-olds rank among the peers from the countries with lowest proportions of excessive time spent watching TV (Figure 2). In the last decade, we have noted less of television watching; however, we cannot draw the conclusion that sedentary behaviours in general are declining. It is more likely that adolescents are switching from watching TV to other sedentary behaviours.

56% of adolescents do not eat breakfast every weekday.
60% of adolescents do not consume fruit on a daily basis.
75% of adolescents do not consume vegetables on a daily basis.
37% of adolescents frequently consume sugar-sweetened beverages.
36% of adolescents do not brush their teeth in accordance with recommendations.
80% of adolescents do not meet the recommendations for physical activity.
*every weekday, **at least once a day, ***more than once a day, ****60 minutes a day every weekday

**Figure 1:** Regular breakfast consumption, regular fruit consumption, regular vegetable consumption, frequent consumption of sugar-sweetened beverages, regular tooth brushing and regular physical activity in 2010 among Slovenian 11-, 13- and 15-year-olds and in total (HBSC 2010)

*every weekday, **at least once a day, ***more than once a day, ****60 minutes a day every weekday

**Figure 2:** Regular breakfast consumption, regular fruit consumption, frequent consumption of sweetened beverages, regular tooth brushing, regular physical activity and excessive time spent watching television among 15-year-olds in Slovenia in comparison with the international average in 2010 (HBSC 2010)
Adolescence is a period of fast changes and trying out new roles and behaviours – including risk behaviours (tobacco, alcohol and cannabis use, unprotected sexual intercourse, violence, etc.). For some adolescents, the contact with a risk behaviour is a one-time experience and a transitional period in time of growing up; for others, it is a long-lasting change continuing into adulthood. Engaging in risk behaviours increases with age and different risk behaviours often occur simultaneously. Risk behaviours are associated with poorer academic performance, increased likelihood of social, behavioural, physical and mental problems, morbidity, premature mortality and other negative short-term and long-term consequences. The younger the adolescent when he or she starts to engage in risk behaviours and larger the number of risk behaviours, the greater the likelihood of negative outcomes. Risk behaviours represent an important burden for the society and individuals, health and the healthcare system, which is why monitoring, preventing and restricting risk behaviours are extremely important, as illustrated by the following examples:

- Tobacco and alcohol use are among the most important preventable risk factors for mortality and number of years lost due to ill-health, disability or premature death in Slovenia.
- Almost a fifth (19%) of all deaths among the inhabitants of Slovenia who are 30 years or older are attributed to tobacco, as well as each 7th premature death in the 30–44 years age group and each 3rd premature death in the of 45–59 years age group.
- Injury and poisoning due to alcohol intoxication are the leading causes of hospitalization in the 10–19-years age group.
- In Slovenia, mortality which can be attributed directly to alcohol use exceeds the European average.
TOBACCO, ALCOHOL AND CANNABIS

A significant proportion of adolescents in Slovenia use tobacco, alcohol or cannabis

Proportions increase with age (Figure 3). 27% of 15-year-olds regularly drink alcoholic beverages (once a week or more), 19% regularly smoke tobacco products and 23% have already tried cannabis. The ESPAD survey shows that despite legislative restrictions adolescents report that they find tobacco products, alcoholic beverages and cannabis to be easily available; adolescents in Slovenia report so in higher proportions than their peers in other countries.

The past years saw no favourable changes in smoking habits of adolescents

Approximately a quarter (24%) of 15-year-olds first tried smoking at an early age (13 years or younger), among them were fewer girls than boys. Accordingly, we note less smoking initiation in 11- and 13-year-old girls than in boys of the same age, however, no differences were noted in terms of frequency of smoking. Compared to boys, girls who start smoking at an early age are therefore more likely to continue. Among 15-year-olds, no gender differences in smoking were noted, while the ESPAD survey of adolescents that are a year older shows that girls smoke in higher proportion than boys. With regard to frequency of smoking, adolescents in Slovenia generally do not exceed the average of their peers in other countries (Figure 4). While a decreasing trend in tobacco use has been noted among Slovenian adolescents in the past decade, this can almost exclusively be attributed to favourable changes in the first half of the decade, which is also confirmed by the ESPAD survey. In the second half of the decade, generally no changes in smoking habits were noted, with the exception of an increase in the proportion of smokers among girls and a decline in the proportion of individuals with early smoking initiation.
Alcohol use in 15-year-olds (particularly boys) exceeds the international average; in the last decade, an increase in early first alcohol use and among girls increase in prevalence of drunkenness has been noted.

Alcohol use is more common among boys, except first alcohol use at age 13 years or younger, where no gender differences were noted. In terms of drinking habits, gender differences are decreasing. Alcohol use among 11- and 13-year-olds in Slovenia is close or equal to the international average. On the other hand, alcohol use among 15-year-olds (particularly among boys) exceeds the average considerably and ranks Slovenia around the 10th place (out of 38 countries) in all monitored indicators of alcohol use (Figure 4). The ESPAD survey also shows that in terms of alcohol use among 16-year-olds, Slovenia ranks above the average of peers in other countries. In the last decade, we noted an increase in prevalence of drunkenness in girls, mostly 15-year-olds. In terms of regular drinking, no changes were noted. Among 15-year-olds, we noted an increase in first alcohol use at age 13 years or younger.

Cannabis use has increased in the second half of the last decade, Slovenia ranks above the international average.

Among 15-year-olds, use of cannabis is present in a considerable proportion, more often in boys than in girls (Figure 4). Cannabis use among 15-year-olds in Slovenia considerably exceeds the average of their peers from other countries (Figure 4) and ranks Slovenia in the top 10 countries (out of 37). As shown by the ESPAD survey, Slovenia also ranks higher than the international average among 16-year-olds. In the last decade we have noted a declining trend in cannabis use among 15-year-olds; however, this can exclusively attributed to favourable changes in the first half of this period, as also confirmed by the ESPAD survey. In the second half of the decade, cannabis use in this age group has increased.
**SEXUAL BEHAVIOUR**

Sexually active individuals are predominantly boys, but the proportion of sexually active girls is increasing

Among 15-year-olds, more boys than girls had already had a sexual intercourse. Almost three quarters (72%) used a reliable method of contraception during the last intercourse; in this respect, no gender differences were noted. The proportion of sexually active 15-year-olds is slightly above the average of their peers in other countries (Figure 4). In condom use, Slovenian adolescents exceed the international average and are close to the average in contraceptive pill use. The proportion of sexually active girls has increased in the last decade, while the proportion of sexually active boys has remained at a similar level. There have been no changes in extent of contraceptive use during the same period of time.

**VIOLENCE**

13-year-olds are predominant among adolescents involved in violence, prevalence of violence in this age group has been increasing in the last decade

Boys also more often report to be involved in violence. The highest proportions of those who are involved in physical fights, bully others or are victims of bullying are among 13-year-olds and the lowest among 15-year-olds (Figure 3). Regarding the extent of fighting and bullying, adolescents from Slovenia rank close to the average of peers in other countries, while they rank below average with regard to being a victim of bullying. During the last decade, the proportion of adolescents who bullied others has increased and the proportion of bullied girls has declined. There were no changes in the extent of fighting during the same period. The group that particularly stands out are 13-year-olds – in this group, the level of violence has already been the highest; in the past decade, it also saw an increase in bullying others, as well as in fighting.
Figure 3: Tobacco use, alcohol use and violence in 2010 among Slovenian 11-, 13- and 15-year-olds and in total (HBSC 2010)

Figure 4: Tobacco, alcohol and cannabis use and sexual behaviour among 15-year-olds in Slovenia compared to the international average in 2010 (HBSC 2010)
15-year-olds:
27% regularly drink alcoholic beverages,
19% regularly smoke tobacco products,
23% had already used cannabis,
29% are sexually active,
9–10% are involved in violence.

SELF-RATED HEALTH, INJURIES, BODY IMAGE AND WEIGHT-REDUCTION BEHAVIOUR

From a health standpoint, children and adolescents are among the more vulnerable groups, each of which are characterized by their own specific and distinct features. In general, children and adolescents tend to be healthier than adults and their health problems are usually related to growth and development, lifestyle and broader social determinants. The leading cause of mortality and a prominent cause of morbidity in school children and adolescents are preventable injuries.

Health issues and health behaviours in children and adolescents can be studied in a number of ways. One way is to use subjective indicators that are derived from the adolescent’s own understanding of personal health – physical and mental well-being. The second option is to study the factors that may have a positive or a negative impact on health. This means that we also study habits and health behaviour, social networks and other characteristics. The Health Behaviour in School-Aged Children study integrates both approaches and studies self-rated health, lifestyle, risk behaviours, as well as the social context.
SELF-RATED HEALTH

According to self-rated health, Slovenian adolescents rank highly in comparison with peers from other countries

The majority of adolescents (90%) rate their health as excellent or good and only a minority consider it poor, which ranks Slovenia highly among other countries. Girls rate their health as poorer and the proportion of adolescents who rate their health as poorer increases with age. In the last decade, fewer adolescents have rated their health as poor. The proportion has decreased in girls and in age groups of 11 and 15 years.

The majority of adolescents satisfied with their life

The majority of adolescents (87%) are satisfied with their life (Figure 5), which ranks Slovenia above the international average – in the top half of the countries. Boys are more satisfied with their life than girls and life satisfaction declines with age. In the last decade, no differences were noted in self-rated life satisfaction, except in girls, where we have noted an increase in proportion of those who report high life satisfaction.

Fewer psychosomatic symptoms than in peers from other countries

Data show that approximately 17% of adolescents experience multiple psychosomatic symptoms (e.g. stomach ache, back pain, feeling low, irritability, nervousness, insomnia, etc.), among them more girls than boys. The proportion of adolescents who experience multiple psychosomatic symptoms increases with age. With regard to the proportion of adolescents with multiple psychosomatic symptoms, Slovenia ranks last among the countries in all age groups, which means that Slovenian adolescents experience fewer psychosomatic symptoms than their peers. In the last decade, we have noted a decline in the proportion of adolescents who experience multiple psychosomatic symptoms. Less favourable is the fact that 29% of adolescents experience feelings of depression and 33% of them have a low health-related quality of life.
The majority of adolescents rate their health as excellent or good. In comparison with the international average, adolescents in Slovenia rank among those more satisfied with their lives.

INJURIES

More frequently injured than peers from other countries
Slovenian adolescents reported a greater number of injuries in the last year than is the average in other countries. Approximately 47% of respondents have been injured at least once. Injuries were more frequently experienced by boys than girls and by 13-year-olds, while 15-year-olds experienced the fewest injuries (Figure 5). In the last decade, no substantial changes were noted in the number of individuals injured, but injuries remain the leading cause of mortality and morbidity in school children and adolescents that can be prevented by appropriate measures.

BODY IMAGE AND DIETS

In terms of negative body image, Slovenian adolescents rank very highly compared to the international average
48% of adolescents are satisfied with their bodies and rate them as just right, while 39% of them rate themselves as “too fat”. In terms of self-rated overweight, Slovenia ranks at the very top of the participating countries. Girls more often rate themselves as overweight than boys. The proportion of adolescents who rate themselves as overweight increases with age (Figure 5).

In the past decade, no differences were noted in the proportion of individuals who rate their bodies as just right or too fat, with the exception of boys in total and 11-year-old boys, where we have noted a decrease in
the proportion of those who rate their bodies as just right and an increase in those who rate themselves as overweight.

**An increase in weight-reduction behaviour among boys in the last decade**

13% of adolescents report being on a diet (or doing something else to lose weight) (Figure 5). Slightly over a half of adolescents (53%) consider their weight to be fine, 8% believe that they should gain weight. 27% of adolescents are not on a diet, but believe that they should lose weight. More girls than boys are on a diet and the proportion of individuals on a diet increases with age. Compared to the international average, Slovenia ranks approximately in the middle or around the average of all participating countries.

In the last decade, we have noted a decline in weight-reduction behaviour in adolescents, particularly in girls, while an increase in weight-reduction behaviour was noted in boys. With regard to age groups, we have noted an increase in weight-reduction behaviour among 11-year-old boys and a decline among 13- and 15-year-old girls.

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29% of adolescents experienced feelings of depression in the past year.

47% of adolescents experienced medically attended injuries at least once in the past year.

39% of adolescents believe they are too fat, an increase has been observed among boys.

13% of adolescents are on a diet, an increase has been observed among boys.
IMPORTANCE OF SOCIAL CONTEXT FOR ADOLESCENT HEALTH

Social context has an important impact on adolescent health and well-being. For adolescents, the most important social environments are family, peers and school. Adolescents grow up within these environments, learn, internalize the norms and values and develops behaviours for adapting to life within their communities. Social context is studied through ease of communication with parents, peer relationships and attitude towards school.

Good communication with parents and peers is an important protective factor for adolescent health. It influences the adolescents’ positive self-image and self-respect, better self-rated health, greater life satisfaction, fewer physical and mental problems and fewer risk behaviours (violence, use of tobacco and other psychoactive substances). Good peer support protects the adolescent from feeling isolated and depressed. Loneliness and social isolation lead to poorer mental health, psychosomatic symptoms, poorer physical activity habits, more frequent injuries and
bullying. On the other hand, a lot of time spent with peers may bring about more risk behaviours (use of tobacco, alcohol and illicit drugs).

School also exerts an important influence on adolescent development and health. A supportive school environment can be a source of positive health, a healthy lifestyle and satisfaction, while an unsupportive environment can be a source of stress and is often associated with ill health and greater incidence of psychosomatic issues and risk behaviours. Feeling pressured by schoolwork is related to stress, psychosomatic difficulties and poorer self-rated health. School performance is an important predictor of an individual’s future life opportunities, including education and employment opportunities, as well as morbidity and mortality in adulthood.

FAMILY

Majority of adolescents have good communication with parents; the proportion of adolescents with good communication with parents has been declining in the last decade

The majority of adolescents in Slovenia can communicate with their parents (88% with their mother, and 77% with their father) about their interests. In all age groups, communicating with mothers is easier than with fathers. The older the adolescent, the more likely he or she is to experience difficulties in communicating with parents (Figure 6). In terms of communication with mothers, no gender differences were observed between boys and girls of all ages; however, we find that boys find it easier to talk to their fathers about their interests than girls. In the last decade, we have noted a decline in the proportion of Slovenian adolescents with good communication with parents.
PEERS

Slovenian adolescents spend fewer evenings out than their peers in other countries; an increase in electronic media contacts has been noted.

The majority (93%) of Slovenian adolescents find it easy to communicate with their peers about their interests, ease of communication increases with age. In all age groups, girls communicate with friends more easily than boys. We have noted a decline in the ease of communication with friends, especially in boys.

The majority (89%) of Slovenian adolescents have several (three or more) of close friends; however, the proportion of individuals with close friends declines with age, as relationships become more intimate and emotionally intense. A greater number of close friendships is more frequent in boys than in girls. The findings in other countries are similar. In the last decade, we have noted an increase in the proportion of adolescents with several close friends, especially among girls and among 15-year-olds. Slovenian adolescents rank slightly below the international average with regard to the proportion of individuals with three or more close friends. This holds for all three age groups; the discrepancy is smallest among 11-year-olds, and greatest among 15-year-olds.

Less than one fifth (16%) of adolescents spend at least four evenings per week out with their friends and the percentage increases with age (Figure 6) and is in all age groups higher among boys than among girls. In the last decade, we have noted a decline in frequent evenings out in Slovenian adolescents, especially among boys and among 11-year-olds. Compared to peers in other countries, adolescents in Slovenia rank below the average with regard to frequent evenings out in all age groups.

Less than half of adolescents (42%) use electronic media (telephone or computer) daily for making or maintaining friendships, the proportion increases with age (Figure 6) and is greater in girls, which holds for all age
groups. International data show that in the last decade, the trend of using electronic communication media has been increasing in most countries as well as in Slovenia, particularly among 13- and 15-year olds. As in other countries, electronic media were more likely to be used by girls; in general, Slovenian adolescents rank close to the international average in terms of the proportion of electronic media communication.

**SCHOOL**

An increase of disliking school is noted, Slovenian elementary school pupils rank at the top on the international scale in terms of self-reported feelings of being pressured by schoolwork

Slightly over a quarter (28%) of adolescents in Slovenia like school a lot. The ones that like school the least are 13-year-olds, while 15-year-olds like school the most (Figure 6). Among the two younger age groups, girls liked school more; among 15-year-olds, no gender differences were noted. In the last decade, we have noted an increase in disliking school. 11- and 13-year olds like school far less than their peers in other countries, and 13-year-olds even rank among the top five of those that dislike school most. On the other hand, Slovenian 15-year-olds like school more than their peers from other countries and rank 5th among those that like school the most.

Almost a half (49%) of Slovenian adolescents report being pressured by schoolwork. No gender differences were noted. 11-year-olds report being the least pressured and 15-year-olds the most pressured (Figure 6). In the last decade, no changes were noted in the reports of Slovenian adolescents on being pressured by schoolwork, except among boys and 11-year-olds. In comparison to other countries, Slovenian adolescents feel more pressured by schoolwork than their peers in other countries and rank well above the international average. In terms of feeling pressured by schoolwork, 11-year-olds rank second and 13-year-olds rank third in their respective age groups.
An overwhelming majority (94%) of Slovenian adolescents experience classmate support, perceived as being liked by their classmates, that the classmates are friendly and that they feel accepted. In terms of perceived classmate support, no changes were noted in the last decade. In all age groups, girls are more likely to perceive their classmates as supportive. Compared to peers in other countries, Slovenian adolescents rate above average in perceived classmate support, 11-year-olds even rank at the top of the international scale.

Three quarters (76%) of adolescents in Slovenia rate themselves as successful in school. Subjective rating of school performance declines with age (Figure 6) and, in general, girls rate themselves as more successful. In the last decade, the proportion of adolescents who rate themselves as successful has increased substantially, which can be particularly be attributed to the increase among 15-year-olds. Slovenian adolescents rank high above the international average and are among the top ten in all age groups.

![Figure 6: Communication with parents, peer relationships and school in 2010 among 11-, 13- and 15-year-olds in Slovenia (HBSC 2010)](image)
The communication between adolescents and their parents and peers is good; however, a decline has been noted in the past years.

We note an increase in individuals disliking school; elementary school pupils in particular like school less than their peers in other countries.

A half of adolescents feel pressured by schoolwork; compared to their peers in other countries, Slovenian adolescents rate themselves as more pressured.
DIFFERENCES AND INEQUALITIES IN HEALTH BEHAVIOURS

Health equity means that every individual is able to reach his or her own health potential and that no individual is in an unequal position regarding the reaching of this potential due to inequalities in socioeconomic position or other socioeconomic determinants. We find that Slovenian adolescents from families with lower socioeconomic position or with poorer performance in elementary school or those who chose a less demanding secondary school programme (vocational programme) exhibit fewer healthy habits, more risk behaviours, poorer self-rated health, more life dissatisfaction and a greater number of psychosomatic symptoms, are more likely to dislike school, as well as report communication issues with parents and peers and feeling pressured by schoolwork. This affects the differences in health and health behaviours, starting in adolescence and particularly later on. Data by the Statistical Office of the Republic of Slovenia show that the socioeconomic position of the Slovenian population has been declining in the past years, which may deepen the existing inequalities among adolescents, as summarized in Table 2.

Lower socioeconomic position of the adolescent’s family, poorer elementary school performance and choice of a less demanding secondary school programme all negatively affect self-rated health and the majority of health behaviours in adolescents.
Table 2: The effects of a lower socioeconomic position of the family, poorer elementary school performance and choice of a less demanding secondary school programme on self-rated health and prevalence of health behaviours in adolescents

<table>
<thead>
<tr>
<th></th>
<th>Lower Socioeconomic Position of the Family more frequent/increased</th>
<th>Poorer Elementary School Performance more frequent/increased</th>
<th>Less Demanding Secondary School Programme more frequent/increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular Breakfast Consumption</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Irregular Consumption of Fruit and Vegetables</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>Frequent Consumption of Sugar-sweetened Beverages and Sweets</td>
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<td></td>
<td>x</td>
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<tr>
<td>Irregular Tooth Brushing</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Irregular Physical Activity</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Use</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>Cannabis Use</td>
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<td></td>
<td>x</td>
</tr>
<tr>
<td>Sexual Intercourse</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Non-use of a Reliable Method of Contraception</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Violence</td>
<td></td>
<td>x</td>
<td></td>
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<tr>
<td>Poorer Self-Rated Health</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Dissatisfaction</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>Psychosomatic Symptoms</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Negative Body Image</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lower Quality of Life</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health Problems</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling Low and Depressed</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Difficulty Communicating With Parents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty Communicating With Friends</td>
<td></td>
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<tr>
<td>Less Satisfied With School</td>
<td>x</td>
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<tr>
<td>Very Pressured by Schoolwork</td>
<td></td>
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<td></td>
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<tr>
<td>Poor Classmate Support</td>
<td>x</td>
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<td>x</td>
</tr>
</tbody>
</table>
Self-rated health and health behaviours are also affected by the number of close friendships. Among the adolescents with fewer close friends, we noted fewer certain healthy habits, greater number of certain risk behaviours, poorer self-rated health, poorer mental health and more issues in the field of interpersonal communication and school experience.
PROPOSED MEASURES FOR PROMOTING HEALTH AND REDUCING HEALTH INEQUALITIES

By improving health and health behaviours in children and adolescents, we improve the health of the entire population and contribute to a prosperous society.

The health in children and adolescents is closely associated with the health in the entire population and with societal prosperity. Good health of the population is its fundamental right and is crucial for the economic growth, reducing poverty and promoting the society’s development and prosperity. It is therefore necessary to promote health and protective factors as well as prevent risk factors and illnesses by implementing appropriate measures, programmes and interventions. Nowadays, the health of children and adolescents is increasingly more dependent on social and environmental factors, as well as community factors. Adopting an unhealthy lifestyle and risk behaviours in childhood and adolescence often leads to maintaining these habits in adulthood and may result in chronic non-communicable diseases as well as other health problems, in childhood and adolescence, but most importantly in adulthood. Chronic non-communicable diseases are the leading cause of premature mortality in the European Region of the World Health Organisation and represent the greatest burden of disease. Chronic non-communicable diseases already represent a substantial economic burden, which is only going to increase in the next decades.

Promoting a healthy lifestyle and preventing risk behaviours, including the reduction of inequalities, result in lower morbidity and mortality. Protection and promotion of health and a healthy lifestyle not only prevent diseases, but also improve general well-being and quality of life, stimulate the adolescents’ capabilities, control over their own lives and capabilities to confront daily challenges and difficulties, as well as provides the
conditions for an individual’s optimal physical, emotional, cognitive and social development.

**What is important is a whole-of-government approach to adolescent health ...**

Adolescent health not only concerns an individual and his or her social context (e.g. family and school) and also not only concerns the health sector - it concerns the entire society, all sectors that create conditions, structures and environments that may – or may not – support and promote adolescent health. It is thus very important that the mechanisms and structures for determining common priorities and objectives in the fields of health and well-being are established at the governmental level, together with monitoring the process of achieving set objectives and carrying out impact assessments of policies, programmes and interventions on health and (in)equalities in health among children and adolescents. All the policies, measures, strategies and programmes of greater importance that are in the process of being approved or are already enforced in Slovenia should be evaluated from the standpoint of their impact on health (physical and mental) of children and adolescents and on reduction of inequalities.

The measures that should be adopted and implemented are measures that support healthy options, healthy environments, conditions and possibilities for all, the ones that have been tried, do not bring side effects and can be cost-effective in the long term. The implementation of measures and legislation should be monitored and corresponding actions should be taken in case of their violation.

**... and creating and promoting equal opportunities and health supportive environments**

Equal opportunities for raising awareness, education and access to programmes, interventions and the health system are crucial for health and a healthy lifestyle of adolescents, which is why structural conditions need to be provided that will enable equal opportunities, a high quality of
life and access to healthy alternatives for all adolescents. It is important to design environments that will facilitate the adolescents’ decision and promote a healthier lifestyle and healthier choices as well as enable them to spend their leisure time in a more active and healthy way.

The impact of crisis
The data for the majority of the countries that were affected by the recession and the economic crisis indicate a poorer quality of life and standard of living, which in turn affect the well-being, satisfaction and health of the entire population, including children and adolescents. The crisis will probably increase poverty and have a detrimental impact on health and which will result in greater society expenditure and deepen health inequalities. To prevent all this, we have to increase the investment into health promotion and disease prevention. The effects of the crisis may be less pronounced in countries with higher levels of social security and continued health investments. It is thus important that we at least maintain, if not increase, the investments into health promotion and preventive care for children and adolescents. This means that the existing measures that were found to be effective (the system of organized subsidized school meals, system of preventive check-ups, etc.) are maintained and that new effective measures for reducing the noted problems among children and adolescents are introduced.

Greater effectiveness is achieved by an extensive combination of measures and programmes, by strengthening protective factors and by operating in numerous environments and various target groups
Greater effectiveness of measures and programmes can be achieved by an extensive combination of various measures, by operating in numerous environments and through different entry points. Current measures are frequently oriented towards a specific behaviour, but we can be more successful and more cost-effective by applying programmes that simultaneously target a number of health behaviours and diverse environments.
In promoting health behaviours among adolescents, different environments play a key role, most of all family, school, health system, local community, the entire society and various target groups such as parents-to-be, parents, pedagogical staff, as well as children and adolescents themselves. Interaction and joint activities of different environments and target groups are important.

**It is important to initiate programmes and activities as soon as possible and to continue for as long as possible**

The time-framework of programmes and interventions is important. They should be initiated as soon as possible, already among parents-to-be; among children, the programmes and interventions should be introduced when their attitudes and values are formed or before they start to experiment and engage in risk behaviours (with regard to specific characteristics of a given risk behaviour). The programmes and interventions should continue for as long as possible, well into the secondary school or student years. Programmes should be continuous, with an increased intensity in transition periods or greater changes in the life of an adolescent, for instance at the transition from elementary to secondary school, which is especially important in risk behaviours.

**By involving the adolescents, the effectiveness of measures and programmes are improved**

 Measures and programmes in all fields are more efficient if children and adolescents are involved in planning, development and implementation of the measures from the start and if their ideas, opinions and knowledge are used in the process.
The current status in the field of health behaviours in adolescents confirms the need for introducing new measures and amending some of the existing measures, as proposed in the chapters that follow. Adolescents tend to behave in ways that can have a negative impact on their health; it is therefore especially important that we promote the development and maintenance of health behaviours with various measures.

1. Monitoring, Studies, Data Collection and Evaluation

Monitoring and studying self-rated health, health behaviours and family and peer relationships in adolescents are important in order to evaluate the current status and plan and evaluate measures and programmes. It enables identification of factors that determine a healthy or an unhealthy lifestyle, poorer self-rated health and life dissatisfaction in adolescents, as well as groups of adolescents particularly at risk. It is important to carry out corresponding and planned evaluations of the established programmes, measures and interventions, as well as to update them if needed.

Proposed measures:
- Regular quantitative and qualitative monitoring and research of health behaviours, self-rated health and family and peer relationships among adolescents and important others to them, along with social determinants of health behaviours. Adequate finance and in human resources should be provided, and the resulting data should be published and disseminated between various experts and general public target groups.
2. LEGISLATIVE MEASURES

Measures at national level that are of key importance in Slovenia for promoting health environments and options:

- Restricting the marketing of unhealthy food and beverages to children and adolescents, with special protection against marketing at schools (banning advertising, banning snack vending machines, and banning contests).
- Maintaining and improving the system of school-provided meals, as regulated by law (by preserving school kitchen facilities, with the option of consuming all recommended meals during school time or extended stay and including locally sourced food).
- Increasing the availability of healthy dietary choices (fruit, vegetables, dairy products, etc.) for all schools, especially from environmentally friendly local production and processing with optimal use of EU financial assistance.
- Labelling the products high in sugars, salt, caffeine and unhealthy fats.
- Introducing excise duties on unhealthy choices and products, while simultaneously ensuring that healthy choices and products are more affordable.
- Setting the minimal standards and conditions for ensuring safety and preventing injuries.
- Systematically linking the promotions of sport and recreational activities with safety promotions.

Key legislative measures for preventing and reducing risk behaviours in adolescents in Slovenia:

- Substantially increasing the taxation and consequently the prices of tobacco products and alcoholic beverages.
- Introducing a total ban on advertising and point of sale displays for tobacco products and an appropriate restriction or total ban on advertising of alcoholic beverages.
− Adequately restricting or banning other marketing activities in the fields of tobacco and alcohol industries.
− Banning tobacco industry donations and alcohol industry sponsorships and donations.
− Reducing the availability of tobacco products and alcoholic beverages (for instance by introducing licensing of tobacco retailers, limitations on quantity, location and type of tobacco retailers, and limitations in promotion campaigns in case of alcoholic beverages), as well as cannabis.
− Introducing more effective health warnings on tobacco products (pictorial health warnings on both sides of the package, substantially increasing the size of the warnings, replacing quantitative with qualitative descriptions of emissions, etc.).
− Introducing a ban on sales of flavoured tobacco products (sweet, fruity, fresh, etc.) and a ban on certain other additives in tobacco products.
− Further measures to reduce the attractiveness of tobacco products (introducing plain packaging).
− Limiting and regulating the promotion and sale of cannabis products or cannabis containing products, respectively, as well as the tools for cannabis cultivation and use, with the aim of differentiating between cannabis and industrial hemp.

In all cases, the measures need to be complemented by strict monitoring and an appropriate (progressive) penalty policy, as well as by appropriate evaluations.

**Proposed measures:**
− Introducing an appropriate (progressive) penalty policy in relation to specific measures.
− Ensuring a regular and planned evaluation of measures and programmes.
Ensuring a systematic implementation of impact assessments on health and health behaviours of children and adolescents for all important policies and documents of all sectors.

3. MEASURES WITHIN THE FRAMEWORK OF THE SCHOOL SYSTEM

School is the key environment that enables the promotion of a healthy lifestyle, social skills and positive mental health, prevention of risk behaviours and reduction of health inequalities, as it brings together all (or the majority) of adolescents for prolonged periods of time.

New topics should therefore be included in the curricula for elementary and secondary schools, or the existing topics in the field of health and health behaviour enhanced and supplemented. At the same time, appropriate training of school staff, i.e. instructors of the aforementioned topics, should also be ensured. It is of key importance that all adolescents in Slovenia have access to a uniform set of topics and programmes that ensure a common standard of knowledge and skills. Schools should introduce an integrated approach to health promotion, which should – in addition to the topics covered by the curriculum, additional programmes and activities – also include the school principles, norms and endeavours of the entire school community for creating a positive atmosphere and good relationships in the school, boosting interactions and mutual care, enhancing protective factors, preventing risk factors and recognizing mutual connections between adolescents, their families, the school, community and society. As far as risk behaviours are concerned, it is also necessary to ensure a normative approach by forming a responsible attitude and reducing the overestimations of the prevalence of risk behaviours in adolescents. Being inherently included in the system is important, since this ensures the quality, the necessary resources, the continuity and the possibility for evaluation. Additionally, we have to emphasize that all the numerous topics that target the school environment present an ever greater burden for the schools. It is therefore necessary to
identify and develop new entry-points, along with enhancing the existing ones within the framework of the health system, local community and families.

**Proposed measures:**
- Introducing new or expanding the existing health and health behaviour topics (healthy lifestyle and personal hygiene, positive mental health, social skills, good interpersonal relationships, media education, education for sexual health – partner relationships, risk behaviours, safety, injuries, first aid, environmental factors) in the curricula of elementary and secondary schools and implementing them with the objective to provide a uniform standard of knowledge, skills and competences, while at the same time providing a corresponding system of instructor training.
- Promoting an integrated approach to health promotion in schools.
- Implementing healthy habits in the school environment (breakfast clubs, serving areas offering fruits and vegetables, school orchards and vegetable gardens with learning workshops, linking with local producers, constant access to drinking water, an additional PE class, applying “learning through movement” method, active methods of coming to school, recreational recess during classes, promotion of personal hygiene, health oriented extra-curricular activities, facilitating the cooperation between parents and the local community in activities aimed at promoting a healthy lifestyle).
- Ensuring high-quality and safe leisure-time activities (better availability of structured and organized activities such as free access to gyms for families and adolescents in the afternoons).
- Paying attention to safety and prevention of injuries.
- Investigating the underlying reasons of disliking school and feeling pressured by schoolwork and developing appropriate measures.
- Harmonizing the criteria for selecting external providers of health education (entering the school environment) and harmonizing the
standards and criteria regarding contents and methods of implementation.

4. MEASURES WITHIN THE FRAMEWORK OF THE HEALTH SYSTEM

Healthcare system is one of the key systems where health promotion and health education of children and adolescents is implemented. Within the framework of healthcare system, it is possible and mandatory to introduce health topics to parents-to-be, children and adolescents, especially in the framework of Parent Education, the Health Education programme within the primary health care and schools, as well as within community health nursing.

It is necessary to ensure that adolescents have optimal access to the health care system, which will be adapted to them and their needs, confidential and at the same time available to adolescents of all ages, particularly regarding more sensitive topics (e.g. sexual health). The involved personnel should receive appropriate training.

Proposed measures:

- Harmonizing, updating, standardizing, monitoring and evaluating the contents of health education (healthy lifestyle and personal hygiene, positive mental health, social skills, good interpersonal relationships, media education, education for sexual health – partner relationships, risk behaviours, safety, injuries, first aid, environmental factors) within the framework of parent education and preventive check-ups for preschool- and school-children, adolescents and students, including a greater engagement of the health sector in schools and an appropriate system of instructor training.
- Preparing and introducing a personal parental consulting programme in the field of injury prevention at home, in traffic and during leisure time.
– Ensuring optimal and equal availability of and access to all health services to adolescents.

5. MEASURES WITHIN THE FRAMEWORK OF FAMILY

Within the family, an individual acquires habits and gains experience, which is why family constitutes an extremely important environment for acquiring healthy habits and a healthy lifestyle. In addition, family plays an important role in preventing the adoption of risk behaviours (family coherence, family communication, parental attitude and monitoring, conflict behaviour and violence, use of internet and other electronic communication media), which can be facilitated by appropriate family and parent programmes and advice. It is important that family programmes are implemented in a systematic and continuous way.

Proposed measures:
– Ensuring appropriate conditions for promoting high-quality family relationships on a societal level (enable parents to spend quality time with their children and adolescents).
– Developing and introducing programmes for high-quality family relationships and appropriate ways of confronting current challenges (i.e. obesity, injuries, mental health problems and special needs).
– Activating local communities in promoting healthy family habits (regular breakfast consumption, consumption of fruit and vegetables, regular physical activity, monitoring computer use and watching television, regular tooth brushing, injury prevention at home and during leisure-time, prevention of risk behaviours, etc.).
– Developing approaches for raising parental awareness and preparing public health recommendations on risks of electronic communication and risks of using modern communication technologies, as well as health risk factors, injuries and protective factors.
6. OTHER NATIONAL MEASURES

Proposed measures:

- Increasing the affordability of healthy food such as fruit and vegetables, along with setting up conditions and initiatives for transforming the nutritional composition of foods in healthier alternatives, focusing on those unhealthy foods that are especially popular among children and adolescents.

- Planning living environments and traffic paths in ways that facilitate and enable physical activity, socializing and active and safe spending of leisure time, as well as exploring the options for embedding the measures in this field into the regulatory framework.

- Ensuring access to and safe use of green and indoor recreational areas.

- Introducing promotional programmes for promoting a general culture of safe physical activity, including measures such as subsidies, free training programmes and free access to indoor recreational facilities, which will make safe physical activity more accessible to adolescents from families with a lower socioeconomic position.

- Researching the options for prohibiting online sale of legal and illicit drugs.

- Researching the options for restricting the sale of various unhealthy products for children and adolescents.

- Introducing programmes for improving community safety levels along with a combination of strategies for changing the behaviour and the environment.

- Developing programmes for injury risk management aimed at teaching the adolescent on how to recognize risks, confront them and make responsible decisions.

- Developing the monitoring and managing of programmes mentioned in this publication from the standpoint of public health.

- Improving the mechanisms for a more efficient inter-sectoral and inter-institutional cooperation aimed at promoting health behaviours in children and adolescents.
7. GENDER SPECIFIC MEASURES AND MEASURES TARGETING RISK GROUPS

Gender specific measures
Prevalence of healthy and risk behaviours differs among boys and girls, and the same holds true for factors that affect their development. Boys and girls respond differently to promotional and preventive programmes, which is why programmes need to be gender specific, particularly in certain fields, such as sexual health.

Proposed measures:
– Development and introduction of gender specific programmes in certain fields: sexual health, injuries, enhancing positive body-image, promoting physical activity in girls, limiting the increase of body weight in boys, reducing the consumption of sugar-sweetened beverages, etc.

Risk groups require additional attention
In addition to measures targeting the broader population and enabling changes in environments where children and adolescents routinely spend their time, measures for specific groups that need additional incentives in certain health behaviours are also needed. Adolescents that require additional attention are particularly those girls and boys who have lower expectations in terms of their future and careers, who opt for less demanding secondary school programmes, whose school performance is poorer or who experience learning difficulties, who come from families with a lower socioeconomic position, those with a non-existent or less developed social network, those with special needs and those who drop out of the school systems or do not enrol (i.e. school dropouts). It is necessary to design and implement additional, prolonged and intense programmes and interventions targeting these groups of adolescents, while paying particular attention to not increase stigmatisation. The aforementioned measures simultaneously reduce health behaviour inequalities.
Proposed measures:

- Development and introduction of additional, prolonged and more intense programmes for promoting health and enhancing health behaviours (healthy lifestyle, positive mental health, fewer risk behaviours) and enhancing social skills in secondary schools with less demanding programmes (i.e. vocational, shortened and other similar programmes) with the objective of reducing health inequalities.

- Developing and introducing health promotion programmes and programmes for enhancing social skills and health behaviours (healthy lifestyle and personal hygiene, positive mental health, social skills, good interpersonal relationships, media education, education for sexual health – partner relationships, risk behaviours, safety, injuries, first aid, environmental factors) for school dropouts. Introducing social policy measures aimed at reducing social inequalities between families and consequently between adolescents.

8. MEASURES IN THE FIELDS OF INDUSTRY AND MEDIA

Industry and media exert a great influence on adolescents

Different industry sectors can manipulate and mislead individuals by targeted health-related advertising; in this respect, children and adolescents are particularly susceptible. Certain products (modern technology, cosmetics, certain food items, clothes, tobacco products and alcoholic beverages) are associated with appearance, a sense of well-being, success in life, social popularity and identity of an individual as a male or a female. This creates a false impression or belief that in order to lead a successful, high-quality and healthy life, it is important to own a certain product or to be tall, beautiful, etc. In all who do not own or cannot afford these commodities; this fosters feelings of deprivation, low self-esteem, dissatisfaction and failure.

Media exert an important influence on public opinions, beliefs, societal values and consequently on adolescent behaviour. The World Health
Organisation points out that the mass media are central in achieving (or failing to achieve) the objectives in the field of public health.

**Proposed measures:**
- Sensitizing journalists to a more critical and responsible way of reporting on health topics (particularly delicate issues) and directing them towards destigmatisation and promoting health promotion principles.
- Informing and raising awareness of the general public and adolescents about industry and media influence.
THE DOCUMENT IS BASED ON THE FOLLOWING STUDIES AND REPORTS


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This publication is aimed at everyone involved in the formation of policies, measures and programmes in the fields of health and health behaviours of children and adolescents in Slovenia.