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The Permanent Mission of the Republic of Slovenia to the United Nations Office and Other International Organisations in Geneva presents its compliments to the Office of the United Nations High Commissioner for Human Rights and has the honour to enclose herewith a response to the questionnaire on the relationship between climate change and the enjoyment of the human right to health.

The Permanent Mission of the Republic of Slovenia to the United Nations Office and other International Organisations in Geneva avails itself of this opportunity to renew to the Office of the United Nations High Commissioner for Human Rights the assurances of its highest consideration. *Lrd. s. r.*

Geneva, 12 November 2015



Office of the United Nations High Commissioner for Human Rights

GENEVA



UNITED NATIONS, HUMAN RIGHTS
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Resolution A/HRC/RES/29/15-Human Rights and Climate Change

Questionnaire, Answers, Slovenia

Ad 1:

Climate change affects all determinants of health, especially the basic determinants such as clean water and food, shelter, health services and equality. Climate change is human-generated and its adverse consequences have a direct impact on the enjoyment of human rights, including the right to health. By acting on social determinants, climate change could greatly exacerbate health inequities, also highlighting an often neglected aspect of health equity – intergenerational inequity. As mentioned, it is anthropogenic and it is a problem for everyone and the responsibility of everyone.

At the national level, the Constitution of the Republic of Slovenia defines the right to a healthy living environment. This right is furthermore elaborated in the paramount Environmental Protection Act and related legislation. The state is thus responsible for a healthy living environment and has been given an active role in environmental protection.

Challenges may, however, arise due to the fact that responsibilities for the promotion and protection of human rights and for the protection of the environment are usually vested in separate institutions. Ensuring a horizontal connection or a mainstreaming of human rights through all line ministries will therefore be crucial.

Ad 2:

The impact of climate change on the enjoyment of human health is measured in Slovenia and evaluated by different indicators. The legal basis for developing indicators is Article 106 of the Environmental Protection Act (Official Gazette of the Republic of Slovenia, No 39/2006). The national set of indicators consists of different sets, such as environment and energy, environment and transport, environment and health, environment and agriculture, air quality, waters etc. All these sets are relevant in the context of climate change, health and human rights. Each indicator follows the goal clearly stated in EU or national legislation and point to the key development trend that is specific for a certain phenomenon. The indicators employ internationally verified methodologies and are thus generally comparable on the international level. In the context of climate change, health and human rights indicators follow the European Environment Agency's methodology and the ENHIS and UNIPHE methodology developed under the World Health Organization. All indicators are publicly available at the website of the Slovenian Environment Agency, which manages the sets (<http://kazalci.arso.gov.si/>). A detailed list of nationally available indicators related to climate change, health and human rights with related key messages is provided in Annex 1 to this paper.

Based on indicators we could examine the impact of climate change on the enjoyment of the human right to health in Slovenia as follows:

Housing: Outdoor air pollution mainly affects children and the elderly. In Slovenia, approximately 40% of children are exposed to a concentration of 30–40 $\mu\text{g PM}_{10}/\text{m}^3$, which is well above the World Health Organisation guideline values (20 $\mu\text{g PM}_{10}/\text{m}^3$). The most recent data on children admitted to hospitals show that 15% of child hospital admissions occur due to respiratory diseases. Moreover, different studies revealed a connection between the particulate matter PM_{10} (climate forcers) and the development of asthma in children, as well as between morbidity and mortality due to respiratory diseases. It is estimated that climate change could further impair the quality of life, especially in the cities, which is where most people live. Residential combustion sources also contribute to a large portion of the particles, because people use improperly prepared wood as fuel. In terms of health, the following measures are being implemented to improve the quality of air: walking and cycling rather than driving by car, greening the cities, education and public awareness campaigns, as well as introducing remote district heating and gas supply. A large portion of particles also comes from the use of inappropriate wood for heating.

Water and sanitation: In 2013, 91% of the Slovenian population was supplied with drinking water from drinking water supply systems in which the quality of water was monitored. In cities, usually everyone has access to drinking water that is being monitored. By connecting unmonitored small-scale facilities to larger systems with professional management and supervision, safe drinking water supply is ensured. Between 1997 and 2013, 1–3 outbreaks of waterborne diseases were reported annually in Slovenia. In each outbreak, 9–263 cases were reported. The following measures would contribute to a lower number of outbreaks of waterborne diseases: access to safe drinking water for all residents of Slovenia; improvement of the microbiological quality in drinking water mostly in terms of faecal contamination and especially in small-scale systems; early detection, warning and control of outbreaks in waterborne diseases.

Health:

Climate change has an influence on morbidity and mortality due to heat waves; it increases the number of people suffering from consequences of floods, storms, fires and droughts, and increases the number of people at risk of certain vector-borne diseases. An increasing average air temperature is projected in Slovenia, leading to increased ozone pollution and related health burden. Slovenia has also observed longer growing seasons. These result in an increased burden of disease due to pollen from Alder (*Alnus*), Birch (*Betula*), grass (*Poaceae*) and ragweed (*Ambrosia*) in outdoor air. Human exposure to this pollen causes allergies, dermatitis or even worse, asthma. Slovenia recorded more deaths in heat waves, increasing trends in the incidence of malignant melanoma and non-melanoma skin cancers, and a higher incidence rate of Lyme disease. But, as we know, human exposure to UV radiation, ticks, and air pollutants are also strongly influenced by lifestyle and human behaviour.

Food:

The Ministry of Agriculture, Forestry and Food passed the **Resolution on strategic guidelines for the development of Slovenian agriculture and food technology until 2020 – Zagotovimo.si hrano za jutri** (Let us ensure food for tomorrow) (Official Gazette of the Republic of Slovenia, no. 25/2011 of 4 April 2011) which includes the strategic objectives of agricultural policy as per the principles of sustainable agricultural development, which also include the objective of ensuring **food security** through the stable production of safe and high-quality food accessible to consumers.

Agriculture is affected by the consequences of climate change which have an impact on the development of agriculture. Higher concentrations of greenhouse gas emissions, higher global mean temperatures, changes in the patterns of annual and seasonal precipitation and frequency of extreme phenomena influence the quality and quantity of food, steady production, natural environment of agricultural areas, availability of water sources and soil, which modify the conditions for farming. Climate change also affects the food supply, which increases the potential for the growth of poverty and malnutrition and worsening health of the entire population.

The primary task of Slovenian agriculture is to produce food of the best quality and safety. The objective of production is to improve high technological, phytosanitary and veterinary standards, environment protection and animal welfare standards. The sustainable and efficient use of available productive capacity is the foundation of agriculture for providing food security, i.e. a suitable level of the country's own production and long-term meeting of needs for food which, in the conditions of an increasingly volatile global market, may have a significant impact on the stability and quality of food supply in Slovenia.

The Ministry of Agriculture, Forestry and Food is also actively supporting the enhanced implementation of principles to reduce factors that have a negative impact on climate change. As one of the most important measures in this field, we support improving the implementation of the principle of **short supply chains in all fields**. Short supply chains are to be integrated into trading, catering and tourist offers, and particularly in public procurements involving food and foodstuffs in public institutions. Short supply chains are of the utmost importance, particularly from two aspects:

- In terms of agriculture, they increase food self-sufficiency,
- and from the aspect of the environment, **short transport routes** have a beneficial impact on reducing concentrations of greenhouse gas emissions and the carbon footprint.

According to the latest data, the share of locally grown food in educational institutions is 38 per cent. We wish to increase this share with various activities, particularly regarding food and foodstuffs for which self-sufficiency is not problematic. According to data for 2014, the self-sufficiency rate in Slovenia is more than 100 per cent in the production of apples, milk, beef and chicken meat. The lowest self-sufficiency rate was still found in the production of vegetables. According to data for 2014, the self-sufficiency rate in the vegetable sector was only 38 per cent. We wish to meet at least 50 per cent of demand in this field with local offers by setting short-term objectives.

Agricultural policy measures support the **restructuring of Slovenian agriculture** to form a suitable class of competitive agricultural holdings. Priority is given to capital investments and investments in human resources, which contribute to the provision or preservation of at least one job on an agricultural holding and ensure long-term development. Special attention is dedicated to investments enabling the development of innovative technologies and adjustment to climate change.

Ad 3:

Among other things, the Environmental Protection Act, which operationalizes the right to a healthy environment as contained in the Constitution, clarifies that the goals of environmental protection are to ensure sustainable development and to sustain the conditions necessary for the protection of human health, comfort and quality of life. The principles of preventive action, prudence, responsibility for harm caused, incentives, publicity, participation and judicial protection apply. Where environmental harm cannot be attributed to a private actor or remediated without state participation, the state is responsible for taking action. The state and municipalities also have duties in relation to awareness-raising, information and education on

environmental protection. All environmental data is public and can be accessed by any interested citizen. The participation of the public in environmental decision-making is likewise prescribed. Citizens may seek protection of the right to a healthy living environment before the courts. Furthermore, the national human rights institution (ombudsman) is competent to examine complaints in this field and make recommendations to the government. Civil society is recognized as playing a critical role in advising the state and bringing concerns to the attention of the government.

The intersectoral group established in 2014 is preparing a national climate change adaptation plan (the health sector is involved) to be adopted in 2015, and short-term measures will be defined in it.

Slovenia's National Development Strategy is also expected to set long-term goals for the country with regard to adaptation to climate changes.

In relation to health and human rights, the Operational Programme to Mitigate Climate Change up to 2020 (Ministry of the Environment and Spatial Planning, 2014) is committed to the development of sustainable transport infrastructure, with emphasis on intermodality, energy efficient vehicles with low atmospheric emissions, the development of cycle paths, more accessible public transport and to the kind of spatial planning that would reduce the need to use means of transport, for instance P+R (Park and Ride) infrastructure. In the area of agriculture we should highlight measures associated with the production of high-quality feed, which facilitates the efficient utilisation of the energy in feed rations, the calculation of feed rations for farmed livestock based on their needs, managing the health and reproduction of livestock, selection of animals with low greenhouse gas emissions, grassland grazing of grass-eating animals, capture of biogas from animal manure storage, fertilising using soil analysis results and fertilising plans, spreading manure using techniques that minimise emissions into the air, greening of slopes, implementing measures to prevent erosion and maintain soil fertility.

Frequently no measures are taken until after people's health has been irreversibly affected. The health sector must accordingly work as a catalyst in this field.

The public health sector is involved in intersectoral work in this field; it cooperates with WHO, prepares different materials, and raises awareness about the potential impact of climate change on health and recommendations on how to prevent illnesses. An important document in this field is the Children's Environmental Health Action Plan, based upon the Parma Declaration and Slovenian Strategy. The health sector continues to monitor infectious diseases, to conduct its project against children's exposure to the sun in schools and kindergartens, and to draft documents for the public about floods and heat waves.

Ad 4:

Preventing industrial accidents, which fall under the EU Seveso Directive, lies within the competence of the Ministry of the Environment and Spatial Planning, which also works to prevent certain natural disasters. Thus for instance through regulations it manages watercourses to prevent flooding.

The Administration for Civil Protection and Disaster Relief (the body in charge of acting in natural and other disasters is the Ministry of Defence and its attached authority) has prepared an emergency response plan for floods, landslides, and avalanches.

The basis for preparing for and responding to natural disasters or the consequences of such disasters is provided by the Resolution on the National Programme of Protection against Natural and Other Disasters 2009-2015 (RENPVNDN), adopted on 15 July 2009 by the Slovenian National Assembly.

Slovenia lies at the meeting point of the Alps, the Pannonian Plain, the Dinaric-Karst region and the Mediterranean. Karst terrain covers around 9,000 km² or 44 percent of the country's territory. The aforementioned landscape types mark Slovenia's physical environment with an extraordinary diversity of terrain and natural beauty, while at the same time this exposes the country to numerous natural and other disasters. Slovenia is threatened mainly by disasters such as floods, earthquakes, infectious diseases among people, big wildfires, drought, storms, landslides and rock slides, mud slips, nuclear or radiological accidents, disasters at sea, railway accidents and accidents in railway tunnels, transport accidents on motorways and fast roads with large numbers of injuries, accidents in road tunnels, avalanches, accidents with hazardous materials, high snow, glaze ice, especially dangerous animal diseases and certain other disasters. The damage caused in Slovenia by natural and other disasters grows more considerable each year. The greatest damage was in years of major disasters, for instance 1976 and 1998 after the Posočje earthquakes, 1990, 1998, 2007, 2010 and 2012 from flooding and 2014 from glaze ice.

In order to prepare for changed climatic conditions and thus an increased probability of natural and other disasters, climate scenarios were formulated to define the increased probability of individual weather-related disasters.

Slovenia has a professional rescue and relief service staffed by professional firefighters and medical auxiliaries operating as part of the public health sector. The coordination and cohesion of this service and its individual parts through information and communication technology systems and the use of other capacities in the system of protection against natural and other disasters for the service's requirements are very diverse. Numerous capacities remain unutilised and often depend on the circumstances and possibilities of individual health centres. There is a very uneven, and on average insufficient, readiness of health capacities to receive a large number of suddenly injured or sick people. In this area an intensive reorganisation of services is underway, and this should enable rapid and effective action in all situations.

Activities are also being pursued here to supplement the national plan to deal with pandemics and to assign tasks from the plan by activity and provider.

Special attention is focused on the single system for monitoring background radiation for the purpose of action in nuclear and other radiological dangers, and this is linked to other national and European systems of this kind. This served as the basis for making a single plan of monitoring and detecting radiological, chemical and biological threats, sampling and inspecting samples and notifying the public. The single system of observation, notification and raising alarms includes the plant protection service and the service monitoring the health of animals and food of animal origin.

We have set up specialised Civil Protection units and services, which must maintain a high level of readiness, or are intended to operate across the entire country and also assist other countries. They operate in all regions and cooperate with relevant commercial companies that have the necessary technical and other capacities that can be used in earthquakes, storms, landslides and similar disasters. Readiness for action also involves the services of relevant institutes, the plant protection service, the service monitoring the health of animals and food of animal origin and other highly specialised capacities, which in line with the protection and rescue plans perform certain tasks or provide support for protection, rescue and relief.

Special concern is focused on the continued assignment and fulfilment of preparations in public health to ensure the conditions for receiving a large number of injured or sick persons in a very short time. Emphasis will also be placed on the threat of increasingly frequent heat waves, especially in urban centres.

Reserves of funds and equipment are maintained for the simultaneous management of around 20 outbreaks of any especially dangerous animal disease in a small scale, which can occur simultaneously in different areas of the country. The funds and equipment are intended in particular for establishing disinfecting barriers and for performing cleaning and disinfecting at certain locations in the area determined around the outbreak of disease.

As for drinking water supply, there are capacities in reserves to set up temporary provision for at least 10,000 persons, and this can be expanded with the use of filtering devices.

By purchasing barrages, Slovenia is also preparing for intervention in the event of a sudden pollution of the sea. Gradually we will also start creating reserves of floating curtains and other means to limit pollution on watercourses.

Certain firefighting units that perform protection and rescue tasks of wider importance have special reserves of sanitary equipment and assets for the event of disasters involving a large number of injured and sick people. Depending on the needs that would arise in natural and other disasters in the next medium-term period, other assets are placed in reserve.

The planned development of military capabilities will involve studying and providing the cooperation of military laboratories and other capacities of radiological, chemical and biological protection for intervention in accidents with hazardous substances, including the possibility of forming field teams for reconnaissance or intervention in hazardous substance accidents. In the future, the helicopter assets of the Slovenian armed forces will be equipped and used principally for extinguishing fires in the natural environment and to support mountain rescue. Police helicopter assets will be used as a transport help in performing these tasks, and these assets will be intended in the long term primarily to support the emergency medical service and for helicopter transport of sick persons to health organisations or between health institutions. To this end the country will supplement the interdepartmental plan for using state aircraft for natural and other disasters.

Activities will be initiated for the purchase of a specially equipped helicopter to provide emergency medical helicopter services. A study will be made of the possibilities for joint procurement of protection and rescue equipment for work in conditions of radiological, chemical and biological contamination for the protection and relief service, the police and Slovenian armed forces.

Ad 5:

There are some good practices:

Our capital city Ljubljana won the 2016 European Green Capital Award.

We participated in the Energy Neighbourhoods² competition.

Some NGOs ran awareness campaigns (cartoons).

Green roofs at petrol stations.

Energy renovation of hospitals, founded by the government of the Republic of Slovenia, 15 out of 27 in from 2010 to 2015, spent sources (EU cohesion 85% and 15% of self-contribution) EUR 37,973,509.74. We are now in preparation for a new plan for the period from 2015-2020. After that period we plan to complete the energy refurbishing of about 80% of hospitals.

TABLE: Environment, climate change and human rights related indicators in Slovenia

Indicator or code	Indicator	Key message	National commitments, legislation and policy frameworks
[PS01]	Estimated damage caused by natural disasters	The most frequent natural disasters in Slovenia are storms with hail and strong winds, floods and fires. From 1994 to 2008 hail, strong wind, drought and floods were responsible for over 70% of all damage caused. The amount of damage over the years varies. In the recorded period the average cost of damage amounted to over 0.4% of GDP.	National Water management plan 2015-2020, Ministry for the Environment And Spatial Planning; Resolution on the National Programme of protection against natural and other disasters in the years 2009 to 2015 (Official Gazette of the RS, št. 57/09)
[PS03]	Greenhouse gas emissions	In Slovenia GHG emissions in 2012 were 2.8% lower in comparison to 2011. The main reason for lower emissions is still the economic crisis. The increase of GHG emissions in Slovenia in 2012 by 1.3% was observed only in transport. In all other sectors GHG emissions have been lower than in 2011. Total GHG emissions in Slovenia in 2012 reached the value of 18,911 Gg (gigagram = 1000 tons or kilotons) of CO ₂ equivalent, which is 7.1% below the base year. Slovenia intends to achieve the Kyoto target by introducing sinks (in the amount of 1,320 kilotonnes of CO ₂ per year).	Action program for reduction of the GHG emission up to 2020, Ministry of the Environment and Spatial Planning 2014 Related EU/Global legislation/commitment: Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 in Kyoto protocol.
[PS04]	Precipitations and temperature	The average air temperature is increasing in Slovenia faster than the global average. The increase is most evident in the last three decades. Trends in annual precipitation are not as obvious as temperature trends, and changes between years and regions are large. Warming of the atmosphere will continue according to the climate change projections. Annual precipitation will not change significantly, while there will be less precipitation, especially during summer.	Meteorological Activities Act (Official Gazette of the RS, No 49/06); Resolution on the National Programme of protection against natural and other disasters in the years 2009 to 2015 (Official Gazette of the RS, št. 57/09)
[PS05]	Changes in glacier extent	The average air temperature is increasing in Slovenia so much that the glacier disintegrated into several parts. In the first decade of the 21st century the glacier stagnated. The last major recession of the glacier was registered after the hotter-than-average summer of 2003. In most of the subsequent years the snow on the glacier had not melted by the beginning of the next accumulation season.	Resolution on the National Programme of protection against natural and other disasters in the years 2009 to 2015 (Official Gazette of the RS, št. 57/09) Related EU documents: White paper - Adapting to climate change : towards a European framework for action {SEC(2009) 386} {SEC(2009) 387} {SEC(2009) 388}
[PS06]	Annual growing season length	In Slovenia, the annual growing season has lengthened. Projections of the growing season point to a further increase all over Europe,	Action Plan for the strategy of adapting Slovenian agriculture and forestry to climate change for the years

[PS07]	Extreme weather events	<p>mainly because of an earlier start in the spring growing season and its subsequent end in autumn. Lengthening of the annual growing season will expand northward for warm-season crops.</p> <p>Temperature observations show a growth of maximum and minimum absolute temperatures between 1961 and 2013, reflecting global warming. The number of hot days is increasing, including the frequency of extreme hot days with a daily maximum temperature above 35°C. The number of days below freezing shows a decline. Apart from temperature, another climate change related concern is the change in the precipitation regimes between regions and individual seasons. The number of storms with strong winds, heavy showers and hail is growing annually. In the last two decades we faced catastrophic droughts and excessive humidity with floods within the same year.</p>	2010 and 2011, Strategy for adaptation of agriculture and forestry to climate change
[GZ01]	Forest decline and defoliation	<p>The health of forests has been relatively stable in recent years and is comparable to other Central European countries. Based on the new findings, the annual fluctuation of estimates is a consequence of the changing weather conditions between individual years.</p>	Resolution on national forest program (Official Gazette of the RS, No 111/07)
[KM21]	Irrigation of agricultural land	<p>The land area prepared for irrigation increased from 4,554 ha to 9,695 ha in the period 2000-2008, and their share in total utilised agricultural area from 0.9% to 2%. Water consumption per hectare of land prepared for irrigation, which strongly depends on weather conditions in each year, has decreased since 2000.</p>	Rural development program of the Republic Slovenia for the period 2007-2013
[KM18]	Nitrates in Groundwater and Agriculture	<p>In Slovenia, alluvial aquifers comprise 60% of drinking water sources, and karst-fractured aquifers make up 40%. Due to populated areas and intensive agricultural production, alluvial aquifers are exposed to greater risks of pollution with nitrates. In two out of four alluvial aquifers (Lower Savinjska dolina valley, the Bolska River valley and Prekmursko-Mursko polje), excessive burdening of groundwater with nitrates (more than 50 mg/l) was detected in the period between 1993 and 2004, and individual samplings of nitrate concentrations were also exceeded in the Krško-Brežiško polje aquifer. Three selected karst-fractured aquifers did not indicate excessive burdening with nitrates.</p>	Decree on groundwater status (Official Gazette of the RS, No 25/2009) Related EU legislation: Water Framework Directive; 2000/60/EC
[KM17]	Soil quality	<p>Organic matter in soil is an important indicator of its quality. In general, soil in Slovenia is well supplied with organic matter; this is</p>	Agricultural Land Act (Official Gazette of the RS, No 59/1996)

		<p>evident from soil map data, which indicate that 86.2% of agricultural land contains more than 2% organic matter and 30.9% of land contains more than 4%. The results of laboratory analyses of soil samples taken in 2005 present a similar picture: 88.6% of samples contained more than 2% organic matter and 37.3% of samples contained more than 4% organic matter. This relatively good condition of the soil is due to the fact that grassland is the prevailing element in the composition of agricultural land and that arable land and permanent crops are relatively abundantly fertilized with livestock manure. We established that in areas with intensive land cultivation, the soil has a lower organic matter content than the soil on land that is not ploughed or deep ploughed. The reason for this is the more intensive rate of mineralization of organic matter on such land.</p> <p>In the period 1960–2012 the average sea level on the Slovenian coast rose by 1 mm/year, in the last decade the rate of sea level rise has accelerated.</p> <p>The quality of bathing water in coastal zones in Slovenia is very good. It deteriorated only in turbulent weather.</p>	
[MR02]	Sea level		
[MR05]	Bathing water quality in coastal zones		<p>Rules on the quality of bathing water (Official Gazette of the RS, No 79/03 and 96/06)</p> <p>Related EU legislation: <u>Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water as amended by Council Directive 91/692/EEC (further amended by Council Regulation 1882/2003/EC), and Council Regulation 807/2003/EC</u></p>
[NB02]	Endangered species	<p>Despite its small surface area, biodiversity in Slovenia is extremely high. The abundance among numerous plant and animal species is decreasing. They are endangered and might become extinct. For example, more than four fifths of all known amphibians and reptiles as well as almost half of all mammals, which total 41, are on the Red List of threatened species in Slovenia.</p>	<ul style="list-style-type: none"> • Rules on the inclusion of endangered plant and animal species on the Red List (Official Gazette of the RS, No. 82/2002; ARSO) • Nature Protection, Red List of endangered species in Slovenia, no. 17, 1992 Slovenian Environment Agency. • Nature Protection, Red List of endangered species of endangered ferns and flowering plants, Socialist Republic of Slovenia, no. 14/15, 1989 Slovenian Environment Agency.

[VD09]	Inland bathing water quality	Inland bathing water quality in Slovenia is good and comparable with bathing water quality in other European countries.	Rules on the quality of bathing water (Official Gazette of the RS, No. 79/03 and 96/06) Related EU legislation: <u>Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water as amended by Council Directive 91/692/EEC (further amended by Council Regulation 1882/2003/EC), and Council Regulation 807/2003/EC</u>
[VD11]	Groundwater quality	The most heavily polluted groundwater is in aquifers with intergranular porosity in the northeastern part of Slovenia. A statistically significant trend of decreasing concentrations of atrazine and desethyl-atrazine was observed at numerous measuring points. The effect of restriction of nitrogen in the soil with an overall reduction of nitrate concentration has not been detected. Groundwater has better quality in aquifers with karst and fissure porosity. These aquifers need better protection due to the high level of vulnerability.	Decree on groundwater status (Official Gazette of the RS, 25/2009), Methodology for determining the state of groundwater bodies Related EU legislation: <u>Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy</u>
[ZD02]	Asthma and allergic diseases in children	Ljubljana and Maribor hospitals reported on children admitted with asthma. This phenomenon is more and more connected with human sensitivity to allergens and might cause allergic diseases. Recent evidence supports the relationship between exposure to air pollution and asthma, mainly due to exposure to particulate matter (PM ₁₀).	The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).
[ZD03]	Exposure of residents and children to PM10	Slovenia belongs to the group of EU countries that are more polluted with PM ₁₀ . The average annual concentration of PM ₁₀ exceeds the limit value recommended by the World Health Organization for human health (20 mg PM ₁₀ /m ³). Very young children, including unborn babies and the elderly, are particularly sensitive to air pollutants. Analyses show that in Slovenia 2/5 of children are exposed to negative consequences because of elevated PM ₁₀ concentrations. Most children in European cities where PM ₁₀ is monitored are exposed to PM ₁₀ levels that do not exceed 30 µg/m ³ , but in Slovenia 15% of children are exposed to concentrations between 30-40 µg/m ³ . Recent data suggest that in Slovenia, 15% of hospitalisations of children are due to respiratory diseases.	Rules on the assessment of ambient air quality (Official Gazette of the RS, No.127/03, 36/07).
[ZD04]	Number of outbreaks of waterborne diseases	Slovenia reported 1-3 waterborne outbreaks per year during 1997 - 2013. In these outbreaks, associated with drinking water, 9 - 263 cases were reported. No outbreaks were reported in 2006 and 2009. Most outbreaks had unidentified etiologies, some were caused by:	The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).

	attributable to drinking water and bathing water	Cryptosporidium parvum, Escherichia coli, Shigella sonnei, Lambliia intestinalis, rotavirus, adenovirus, astrovirus, norovirus, hepatitis A virus.	
[ZD05]	Access to safe drinking water	In Slovenia, in 2014, 91% of the population was supplied from drinking water supply systems in which monitoring of drinking water quality was conducted at the point of use, at the tap of user. The quality of drinking water is unknown for about 9% of the Slovenian residents (in settlements with less than 50 persons the public supply with drinking water is not obligatory; their individual/own sources of drinking water, rainwater are not monitored, or for other reasons were not included in the monitoring - e.g. incomplete recovery). In the cities, all residents are supplied with drinking water for which monitoring is carried out. Access to safe drinking water in the period 2004-2014 has improved slightly.	<ul style="list-style-type: none"> The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015). Action plan for drinking water supply, Ministry of the Environment and Spatial Planning, 2006. Decree on drinking water supply, Official Gazette of the RS, No. 88/2012. Related EU legislation: <u>COUNCIL DIRECTIVE 98/83/EC of 3 November 1998 on the quality of water intended for human consumption</u>
[ZD13]	The incidence of melanoma in adults	The data for Slovenia show that the number of newly diagnosed cases of melanoma is increasing, more so in women than in men. Most of the melanoma cases are most likely related to acute, occasional and excessive sun exposure, mainly in childhood. According to data for 2012, the age standardized incidence level form melanoma in Slovenia is 21.2/100,000 for men and 20.5/100,000 for women whereas the EU-27 average for the same period is 13.2/100,000 for men and 13.1/100,000 for women.	The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).
[ZD18]	Mortality due to respiratory diseases	One of the main reasons for mortality in Slovenia due to respiratory diseases is chronic pulmonary disease (COPD). The highest mortality due to respiratory diseases in Slovenia is in the Zasavje region and the lowest in the Central-Slovenian region (2009-2013). Mortality due to respiratory diseases is decreasing; in 1999 it was 74/100 000 of all the population, and in 2013 it was 64/ 100 000 of all the population..	The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).
[ZD20]	Heat waves and daily number of deaths	Daily numbers of deaths increase during heat waves. Excess mortality during heat waves is greatest among the elderly and people with pre-existing illnesses. Three heat waves occurred in 2013. The average number of deaths was 52 per day during the period of heat waves and 48 deaths per day during the period of non-heat wave	The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).

[ZD22]	Population exposure to airborne pollen/allergens	<p>days.</p> <p>Exposure to allergen Alder (<i>Alnus</i>), Birch (<i>Betula</i>), grass (<i>Poaceae</i>) and ragweed (<i>Ambrosia</i>) pollen shows big annual swings, with a significant difference between continental Slovenia and Primorje (coastal area). There is a significantly increased burden on the air from betula pollen.</p>	<p>The Action Plan for the implementation of the Strategy of the Republic of Slovenia for the health of children and adolescents in relation to the environment 2012 - 2020 (2015).</p>
[ZD24]	Proportion of resident population living in a flood plain	<p>In Slovenia 7% of people live in flood-prone areas. The most extensive flood areas are in the northeast and in subpannonian Slovenia, in subalpine valleys and basins and plains along the Ledava, Mura and Ščavnica rivers. The largest share of the population in areas of flooding is in the Savinjska (13%), Koroška (12%), Zasavska (10%) and Osrednjeslovenska (9%) statistical regions.</p>	<p>Waters Act (Official Gazette of the RS, No. 57/08), Rules on methodology to define flood risk areas and erosion areas connected to floods and classification of plots into risk classes, Decree on conditions and limitations for constructions and activities on flood risk areas, Decree on establishment of flood risk management plans, The Framework program of the implementation of the Directive on the assessment and management of flood risks for the period 2009-2015, Determination of areas affected by significant floods in Slovenia.</p>
[ZD25]	Notified Lyme borreliosis cases in Slovenia	<p>Lyme disease (LB) is the most common vector-transmitted infectious disease in Slovenia. From 3,000 to over 6,000 patients with LB were registered from 2005 to 2014 in Slovenia. Since the introduction of statutory registration of LB, the incidence rate has been increasing and is one of the highest in the EU. The increase reflects better recognition of the disease, and the general population's awareness about symptoms and signs consistent with LB. We assume that lifestyle i.e. living or working in an environment where there is a possibility of infection, is equally if not more important than the density of ticks and environmental factors.</p>	<p>Contagious Diseases Act (official consolidated text) /ZNB -UPB1/ Official Gazette of the RS, No. 33/2006), The Rules on Reporting Infectious Diseases and Special Measures for Prevention and Control (Official Gazette of the RS, No. 16/1999)</p>
[ZR07]	Air pollution by ozone	<p>The level of air pollution by ozone in recent years is above the target value at the majority of locations in Slovenia. The most polluted area is Primorska (coastal area), due to it having the most favourable weather for ozone formation. Ozone pollution in the Primorska region is also contributed to by transport of ozone and its precursors from the northern part of Italy.</p>	<p>Decree on ambient air quality (Official Gazette of the RS, No. 9/2011), Rules on the setting up of ambient air quality monitoring and methods for its implementation (Official Gazette of the RS, No. 36/07), Related EU legislation: Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe</p>