

Climate change and health in the Barents region – Draft for a joint Action Plan.

Background

Climate change is already observed in the Arctic and the Barents Region and strong changes are to be expected unless large global emission reductions are implemented. The Committee of Senior Officials (CSO) has an elaboration of an Action Plan on Climate Change for the Barents Region as main objective. The involvement of all Working Groups and sectors in the elaboration of an Action Plan is essential and a Joint Working Group on Health and Related Social Issues (JWGHS) has been established. This draft presents proposals for a Joint Action Plan concerning climate change and health.

To take into account the proposals from the CSO's, focussing especially the policy areas adaptation and outreach, seems reasonable.

Adaptation: To limit negative climate impact on local communities especially on human health, counteract flooding in river systems/predict floods, focus on drinking water safety, continue and strengthen cooperation between emergency and rescue services, health- and social care systems.

Outreach: Develop a dissemination strategy for climate change information in order to strengthen cooperation, promote the Arctic Climate Impact Assessment (ACIA) at the national and local level, explore the variety of methods, seek to provide the Arctic communities and residents with information and knowledge, incorporating the materials into education, research and training programmes, in order to strengthen community based preparedness and contingency planning..

Health impacts

Climate change influences public health in several ways. A warmer, wetter climate increases incidents of infectious diseases, for instance, by providing improved living conditions for disease carriers, such as mosquitoes and ticks. The pollen season could be longer and more intense, which would worsen the situation for people with allergies, entailing increased social costs. Climate change may also worsen health indirectly because a warmer climate contributes to more illnesses due to air pollution, and increased precipitation puts pressure on drinking water supplies.

Extreme events, such as storms, landslides, avalanches and floods entail a health risk in the form of injuries to people. More frequent weather changes and more intense weather events may result in an increased risk of accidents. Areas that have traditionally been safe with respect to this kind of events may become more exposed as a result of climate change.

The topography and climate in the Barents Region pose challenges in terms of basic provision of health care, but is specifically challenging regarding emergency medical transport. Disruptions in transport, for example, difficult flying conditions for airborne ambulance services or roads with reduced navigability, may mean that patients arrive later at the hospital. More frequent and intense natural disasters in the future could increase the risk in stops and delays.

Adaptation to climate change; civil protection and emergency preparedness

Climate change will challenge our capacity to prevent and deal with the consequences of natural disasters. With regard to civil protection and emergency

preparedness, the increased risk of climate-related events poses challenges in maintaining important functions and activities. Systematic identification of what risks and what types of negative impact climate change may entail, and analyses of the vulnerability of the individual sectors and society as a whole, will be the key elements of any adaptation effort. Risk and vulnerability analysis will form a necessary basis for assessing measures to prevent or reduce damage caused by adverse events. These analyses will also form the basis for emergency preparedness planning and other tools to handle events if they should nevertheless occur.

Conductive documents (regulations, reports, etc) in the Nordic countries

During the last years there has been worked out and published different official reports regarding adaptation to climate change. In addition, regulations have been made and have come into effect that will also be of importance when climate change is item on the agenda. Official reports from Finland, Sweden, Norway and Russia have all pointed out strategies to build up national capacity to adapt to climate change and reduce the costs to the society where possible. Regulations and instructions concerning a systematic public health work is assumed to be of special interest and importance, as they deal with elements that easily may be entailed to challenges in climate adaptation. Elements in a systematic public health work can be mentioned as follows; Overview of public health and health determinants, strategic societal planning, overall goals and strategies, policy and action plans, implementation of measures and evaluation. An action plan for climate adaptation is expected to be based on these elements, and will therefore appear from this draft for a joint action plan.

With reference to the proposals from the CSO mentioned above it is necessary to draw common conclusions and proposals in the national reports from Finland, Sweden, Norway and Russia.

- Improving international cooperation and national efforts to monitor the spread of vectors etc. that can transfer diseases.
- Research on: Links between climate and pollen consequences and deficiencies in the water supply and sewerage system.
- Attention to the risk of floods, landslides and erosion.
- Maintaining and developing expertise and capacity on infectious diseases in the health service.
- The integration of climate adaptation into routine planning, implementation and development processes.
- Incorporate the assessments of climate change into planning of long-term investments.
- Improving and establishing of existing and new observation and warning systems.
- Preparation for forthcoming changes in the international operating environment.

Further research on climate change and its consequences and evaluation of adaptation potential are required for Russia and in Northwest Russia in particular. Special attention should also be given to the development of early warning systems and techniques for prediction of extreme events leading to serious negative socio-economical and ecological consequences. It is necessary to strengthen studies aimed at the development of technologies contributing to reduction of climate

change, increase in energy saving, use of renewable energy sources, and development of carbon dioxide capture and storage technologies. High-quality performance of the national integrated climate observing system operated under Roshydromet is the basis for successful study of climate change in the country and participation in the international cooperation efforts. Significant dependence of the natural environment and economy on climate, a large variety of expected impacts on socio economic activity in the country and participation of the Russian Federation in international efforts aimed at mitigation of the anthropogenic influence on global climate require well grounded basis for proper definition of national policy in this problem area. The necessary components of such policy are measures directed at decreasing anthropogenic influence on climate and measures of adaptation to changing climate (i.e., prevention or reduction of consequences of climate change).

Currently, WHO runs a project on assessment of vulnerability of population of the Arkhangelsk region and Nenets Autonomous Area to climate change and works with development of an action plan for this pilot region for further use in other Russian regions.

Proposals for measures and activities in a Joint Action Plan

Measures and activities as a relevant follow-up of the national proposals in official reports from Finland, Sweden, Norway and Russia, with special attention to the Barents Region:

- **Integrate health issues** in all climate change adaptation measures (for instance community planning, risk and vulnerability analyses), policies and strategies
- Carry out measures to develop and strengthen early warning **surveillance and preparedness systems** for extreme weather events and disease outbreaks.
- **Map the status and challenges** concerning capacity and competence in order to strengthen health, social welfare and environmental systems and services.