

The Russian Federation is a country with over 144 million inhabitants. Over the last 100 years, the temperature increased on average by 1.29 °C.¹ The effects of climate change are most prominent in the Arctic region, where the coverage of the sea ice has been reducing by 9% every decade and the river runoff has substantially increased. For example, the runoff of the Volga river increased by 15–40%.

CLIMATE CHANGE AND HEALTH

The effects of climate change on the health of the Arctic population can vary considerably depending on factors such as age, gender, socioeconomic status, lifestyle, culture, location and the capacity of local health infrastructure and systems to adapt.

There are several health concerns from climate change, particularly for Arctic populations. In the pilot area – the Arkhangelsk region including the Nenets Autonomous Okrug – the following effects might occur:

- reduced access to health care due to fewer travelling days on the tundra from permafrost thawing (100 per year compared to over 200 days 30 years ago);
- increased risks of unexpected infectious disease outbreaks from changes in zoonoses, bird migration, and tick and mosquito distribution;
- increased mortality and morbidity from extreme weather events;
- particular stress to indigenous populations.

PROTECTING HEALTH FROM CLIMATE CHANGE IN THE RUSSIAN FEDERATION

To prevent and address potential health threats from climate change, the project *Protecting health from climate change in the Russian Federation* assesses the health effects of, and vulnerability and adaptation to climate change, as a basis for the development of a national health adaptation strategy. This strategy is also to be implemented in other Arctic regions.

Specific action aims to improve the delivery of primary health care in areas of the district particularly affected and at increasing security from potential infectious diseases associated with climate change, in particular water- and vectorborne diseases.

Activities also involve providing information for decision-makers, including on early detection of infectious diseases, and contributing to WHO information platforms by sharing data, tools, results and lessons learnt.

This project is filling an important gap in knowledge on the health effects of climate change and adaptation mechanisms. WHO, in cooperation with the Northern Medical State University in Arkhangelsk, organized a first workshop on building capacity to assess vulnerability and adaptation to climate change in the region in September 2009 (see box).

¹ Assessment report on climate change and its consequences in the Russian Federation. General summary. Moscow, Federal Service for Hydrometeorology and Environmental Monitoring. 2008.



Alternative ways of transport are needed for health emergencies as permafrost thawing decreases travelling days on the tundra.

ENHANCING A REGIONAL-NATIONAL DIALOGUE ON CLIMATE CHANGE AND HEALTH

Knowledge transfer and information sharing on climate change and health between the regional and national levels can be enhanced through the involvement of stakeholders at both levels. A communication strategy relevant to the project is being developed.

BUILDING CAPACITY IN CLIMATE CHANGE AND HEALTH: A TOOL FOR HEALTH ADAPTATION

The project aims to build capacity in climate change and health by engaging a number of stakeholders to provide ownership and sustainability, and allowing risk management. Based on a stakeholder analysis, a multidisciplinary advisory committee was set up at the national level, complemented by a working group at the regional level.

In this framework, the Northern Medical State University took the lead in assessing health effects and adaptation capacity in the Arkhangelsk region, including the Nenets Autonomous Okrug. The evaluation focused in particular on:

- defining the current burden of climate-sensitive health outcomes and the most vulnerable groups;
 - projecting changes in health effects over the coming decades;
 - identifying what needs to be strengthened and the estimated costs and benefits;
 - ascertaining the potential health risks of adaptation and mitigation measures implemented in other sectors.

Particular attention was devoted to the Nenets Autonomous Okrug, a northern region whose population has particular difficulties in accessing health care, putting their health more at risk. The assessment identified the main areas for action, including:

- high/low temperature impact, cardiovascular/respiratory diseases and mortality;
 - vectorborne infectious diseases, including encephalitis;
 - food- and waterborne diseases;
 - climate change, ozone-layer depletion and melanoma;
 - emergencies due to weather anomalies and health.



