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THE ARCTIC COUNCIL AND HEALTH ISSUES

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The Arctic Council has been recognized as a unique forum for co-operation between national governments and indigenous peoples in the Arctic. The Council was established in 1996 by the eight Arctic countries with outreach above the Arctic Circle; Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. In addition, six indigenous organizations have the status of permanent participants in the work of the Council. The member states and indigenous organizations take part in the work on de facto equal footing. In decision making the Arctic Council pays great attention to the traditional knowledge of the indigenous peoples. The indigenous populations of the Arctic are represented by the Aleut International Association, the Arctic Athabaskan Council, the Gwich'in Council International, the Inuit Circumpolar Conference, the Russian Association of Indigenous Peoples of the North (RAIPON) and the Saami Council. There is also an opportunity for non-arctic states, inter-governmental and inter-parliamentary organizations and non-governmental organizations to become involved as observers in the work of the Council.

The mandate of the Council covers all aspects of sustainable development, including ecological, cultural, social and economic dimensions of sustainability. Human health is another important element in the work of the Council. Protection of the environment is closely connected with efforts to tackle the health problems that affect the residents of the Arctic region. Exposure to low temperatures is a significant age-old threat to the health of people in the Arctic.

Economic circumstances, lifestyle, exposure to severe cold and contaminants, dietary changes and geographic and political isolation pose many challenges for the people living in the Arctic. Indigenous peoples, with their continuing ties to the land and traditional food and often marginalized status, are generally the most affected by these challenges.

In its report in 1997, the Arctic Monitoring and Assessment Programme (AMAP), highlighted the risks posed to human health and wildlife by persistent organic pollutants (POPs), heavy metals and long-lived radio nuclides. The work of the AMAP contributed positively to the approval of the Stockholm Convention on POPs last summer. The second report on trends in contaminants and their effects

on the Arctic environment and human health will be presented to the Ministers at the 3rd Ministerial Meeting in Inari, Finland, in October 2002.

As the Host Country of the Council for the period 2000 - 2002, one of Finland's ambitions is to make the Arctic Council an international mouthpiece for the Arctic. The Arctic Council is actively involved in the preparations for the World Summit on Sustainable Development in Johannesburg and will raise the Arctic voice there this August. It is a fact that persistent contaminants, particularly certain organics and mercury, are carried to the Arctic over long distances in air currents and by water from Europe, North America and Asia. Thus, they mainly originate far away from the Arctic in temperate and warmer parts of the world. The close cooperation among eight Arctic countries is important, but it is not enough to stop the contamination of the Arctic region. Only by working with other states on a broad international basis can a healthy and clean environment become a reality for the residents of the Arctic.

Environment and Health in the Arctic

Contaminants create a serious health problem in the Arctic because they strongly affect the traditional way of life of the indigenous peoples. In fact, they influence the prerequisite for life - food. The contaminants have a tendency to accumulate in certain animals, especially marine mammals, used as traditional food by indigenous people. Thus, the exposure to contaminants is closely connected to consumption of traditional food.

Even though there is little scientific evidence at the clinical level directly linking effects in children and adults to levels of exposure to contaminants, the recent development of sensitive and specific biomarkers of exposure show that subtle effects have emerged in some parts of the Arctic. In particular, concern has increased over the high exposure of women of child-bearing age and young children to contaminants. This concern is justified as POPs found in blood samples from some Arctic people have been at higher concentration levels than at lower latitudes where the compounds are produced and used. Some of the POPs are endocrine disrupters and potential co-factors in the development of hormone related cancers, altered immune status, and reduced fertility. Thus, it is not difficult to predict that the psychological effect of describing traditional food as "dangerous" could be strong and have a negative effect on traditional ways of life among the indigenous populations. If this happens, the contaminants will not only have physiological impacts on

health but they will also affect mental and social well-being.

The principal heavy metals of concern in the Arctic are mercury, lead and cadmium. As stated in the AMAP report, they are believed to be present in some regions of the Arctic at levels that may pose risks to the environment and human health. Human exposure to mercury is closely related to traditional food, especially of marine origin. Mercury in the diet is in the methylated state. Methyl mercury is a neurotoxic compound that can pass the placental barrier and can be excreted through milk, placing foetuses and breast-fed children at risk. Some indigenous groups, those with a high consumption of marine mammals, have had higher blood concentrations of methyl mercury than recommended by the WHO. Exposure to lead in the Arctic has declined in parallel with the general reduction in the use of lead in gasoline. However, lead shot is still used and is a source of exposure to the metal. All of the health implications of a high cadmium level are not known, but it is known that cadmium is related to renal dysfunction and osteoporosis.

Human exposure to radio nuclides is still a concern, even if such exposure has declined since the cessation of above-ground nuclear testing. The Arctic terrestrial system is more vulnerable to man-made radioactive contamination than temperate areas. The handling and storage of spent nuclear fuel is of major importance in the context of threats to the Arctic environment. The risk of accidents in functioning nuclear power plants also causes concern in some parts of the Arctic.

Health in a social context

A combination of many societal factors generate serious Arctic health risks. Alcoholism, and nowadays drug abuse too, cause huge health problems in many Arctic communities. The incidence of suicide, especially the high suicide rate among youth in remote Arctic areas, is a complex problem with connections to the eroding economic basis of traditional lifestyles and livelihood in many Arctic communities. Strengthening Arctic identities and self-esteem among youth means effective prevention of mental health problems.

Smoking is one of the most severe health risks in Arctic regions. The rates of cigarette smoking are significantly high and especially smoking among youth has increased. Furthermore, passive smoking endangers the health of non-smokers. The climate, in combination with dwellings that are often small, magnifies smoking as a threat to health.

Arctic residents also face a high risk of health problems due to accidents and injuries. Severe weather and hard living conditions contribute to this risk. They also continue to be

vulnerable to epidemics and endemic infectious diseases caused, for example, by certain bacterial infections, the re-emergence of tuberculosis and vaccine-preventable diseases such as measles and diphtheria, and more recently of HIV/AIDS. Another problem is widespread childbearing among teenage indigenous girls who become pregnant before they have an opportunity to educate themselves. How this influences the health of children and their young mothers, and employment among women, should be taken into serious consideration.

Circumpolar Health Cooperation

The Arctic Council with its eight national governments, six indigenous organizations and numerous observers actively promotes circumpolar cooperation in health. Circumpolar cooperation offers added value in addressing health care delivery systems that could bridge the great distances in the vast region. One answer is an Arctic telemedicine project to exchange best practices in the use of new technologies for diagnosis and dissemination of health care information.

The Council pays special attention to the health of children and young people. The initiative on the Future of the Children and Youth of the Arctic includes a health program that promotes health among children and youth in the Arctic, with special emphasis on underprivileged regions, populations and groups.

The development of an International Circumpolar Surveillance system for infectious diseases is an important project collecting and sharing information among public health officials in the eight Arctic countries. It aims to standardize laboratory and epidemiological data that will better reveal the prevalence of infectious diseases and assist in the design of prevention and control strategies.

The Arctic Climate Impact Assessment (ACIA) is one of the most important projects of the Arctic Council. It evaluates and synthesizes knowledge on climate variability and change. It also pays attention to the human health aspects of climate change.

Arctic mortality and morbidity rates are high but insufficient details and knowledge of their connection with various risk factors still prevent the creation of a strategy for sustainable improvement in the health of the arctic population. However, the participation of all stakeholders in assessing and making decisions on Arctic health is yielding positive results. Broad participation in an open, transparent process that builds local capacity is one way to make improvements in human health a key element in the sustainable development of Arctic communities.

The address of the Arctic Council's homepage is www.arctic-council.org

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