



Sustainable Development
Working Group



ARCTIC COUNCIL

ONE HEALTH

Rapid social and environmental change in the Arctic – including climate change – affect the health and wellbeing of millions of humans and animals that call the Arctic home. To manage these risks effectively, one needs to look at the ecosystem as a whole – for a healthy environment, healthy humans and healthy animals. **One Arctic, One Health** is designed to strengthen circumpolar knowledge and practice with regard to disease outbreaks, natural disasters, and related phenomena.

During the U.S. Chairmanship (2015-17) of the Arctic Council, the United States and Canada introduced the One Health project to strengthen regional knowledge sharing and coordination regarding Arctic health concerns.

One Health is a theoretical concept and practical approach for developing and sustaining broad collaboration across disciplines and knowledge systems in order to identify, prevent, and manage health risks in humans, animals and their shared environment. The core principle of One Health is to recognize that ecosystem linkages and interdependencies require a holistic approach to health issues. A One Health approach therefore involves diverse experts and wide ranging stakeholders in addressing the complex health issues at the human-animal-ecosystem interface.

Of particular importance to the Arctic, One Health enhances participatory community-based approaches for identifying and responding to health issues in communities, which take into account traditional knowledge and local knowledge. The Indigenous peoples of the circumpolar region possess immense understanding of their environments and ecosystems based on millennia of living close to nature and practicing subsistence. Their knowledge and observations are critical for recognizing and characterizing real change, and differentiating new patterns from random events.

The project is led by the Sustainable Development Working Group (SDWG) and now is in its third Chairmanship cycle under the leadership of the United States, Canada, and Finland. It continues to foster knowledge sharing, to conduct table top exercises, and to facilitate collaborative investigations of One Health phenomena such as disease outbreaks and natural disasters.

Arctic Council Activities

Circumpolar questionnaire on One Health awareness and practices with more than 200 responses

Two table top exercises (convened in 2017 and 2018)

International Visitor Leadership program that brought circumpolar One Health experts to Alaska (2018)

Circumpolar One Health conference in Oulu, Finland (2019)

Workshop focused on pathogens emerging from thawing permafrost (2019)

Several academic collaborations and published studies

Which health risks do people and animals in the Arctic face?

As temperatures in the Arctic rise, the environment changes: sea ice decreases, coasts erode, permafrost thaws, and the distribution of plant and animal species shifts.

This can lead to health risks for people and animals in the Arctic, such as changes in the spread of water- and foodborne-pathogens and vector borne diseases transmitted by mosquitoes and ticks.

These changes can also affect the quality and availability of drinking water and food. The Arctic's health is further at risk from environmental contaminants. Contaminants generated outside the Arctic region including heavy metals and persistent organic pollutants are transported to the Arctic where they bio-accumulate and enter the food chain – harming various animal species, including humans who depend on wildlife for food.



Finally, people are traveling to, from, and through the Arctic in growing numbers, re-shaping the social and epidemiological profile of the region.

2019 Recommendations from the One Health project to Arctic ministers

The Arctic Council and SDWG should **continue to promote One Health** as a key strategy for regional resilience.

The Arctic Council and SDWG should continue to play a valuable role by **forming a platform for knowledge sharing**, simulated exercises, and collaborative investigations of One Health phenomena, and by **creating avenues for the inclusion of traditional knowledge and local knowledge** as a key aspect of One Health understanding and practice in the Arctic region.

The Arctic Council, SDWG, Member States, Permanent Participants, accredited Observers, and Arctic communities should **promote regular and recurring Table Top Exercises** as well as other international collaborative investigations, educational programs and exchange as tools for continued capacity building and relationship strengthening. Sharing plans for, progress toward, and results of international collaboration with affected communities is a key to successful work.

Arctic Council member states, Permanent Participants, and Accredited Observers should **identify and empower One Health Hubs/Points of Contact that allow simplified communications** in the event of a trans-boundary or circumpolar One Health event, and can provide a framework for future capacity building and coordination activities.



ARCTIC COUNCIL



Sustainable Development
Working Group

For more information:

Jennifer Spence
SDWG Executive Secretary
secretariat@sdwg.org
sdwg.org